

Release

5.1

Luna Imaging Inc.

insight[®]

Insight 5.1 Administration Guide

Insight Studio & Insight Administrator Tools

Second Edition

Luna Imaging Inc.
insight[®]

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Introduction to Insight Studio

Insight Studio is a wizard-based administrative tool which enables Collection Administrators to easily manage and build Collections in Insight without having to worry about the database, file system, or other system-level configuration issues. Instead, Studio and all of Insight 5.x separates the roles of the System Administrator from those of the Collection Administrator.

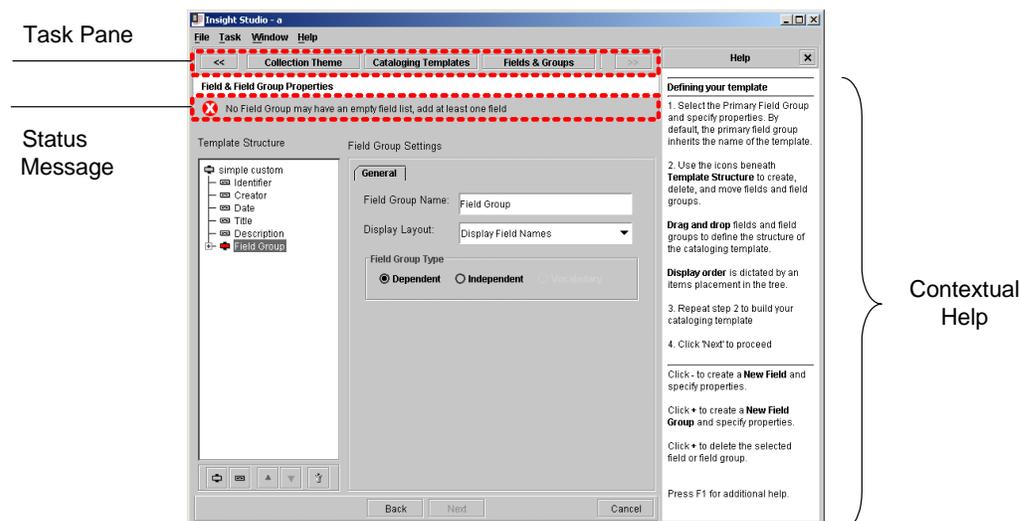
Insight Studio's user interface is split into four main components:

The Task Menu: allows you to move between various Collection building or management tasks

The Status Bar: shows any errors or the current status of a given task.

Contextual Help: shows context-specific information to the task at hand.

The Application Workspace: where the work is done.



Installing Insight Studio

The Insight Studio installers can be found in the **insightstudio** directory of CD2 - Clients. The installers are platform-specific and are separated into directories specific to each platform.

Running the installer

Double-click the installer appropriate to your platform:

Platform	Location
Windows	CD2-Clients:\insightStudio\Windows\installStudio.exe
Mac/OSX	CD2-Clients:/insightStudio/MacOSX/installStudio.zip

It may take a few minutes for the installer to load.

The installer runs in a series of panels, the first of which is an introduction. A panel index runs down the left edge of the display to let you know where you are in the process. You can always go back to previous panels and page back forward through panels you have already completed (the Installer will retain your selections). The Installer will not let you step past a panel when it needs information from you. Default values are provided on most screens. Documentation later in the manual will often assume that default settings have been used.

Selecting an Installation Type

Typical is the only installation set offered on the Choose Install Set panel.

Choosing an installation Location

Installation of the Insight Studio components can take up to 120MB, please plan accordingly when installing the server components. A default installation location will be offered on the Choose Install Folder panel, the default can be changed as needed.

Creating a Shortcut Folder

The installer can create links to Insight Studio and documentation. Please choose the location you would like to create these in. On Windows, the default is to place a shortcut Insight Studio into the Luna Imaging program group, if present. On OS X, the default is to place a shortcut on the desktop.

Selecting a User Manager Address

Insight Studio will look to the User Manager to authenticate users logging in. Enter your User Manager's URL (which should be a fully-qualified domain name). (i.e. insightuser.lunaimaging.com)

Specifying a Collection Data Directory

The Collection Data directory is the location Insight Studio uses for processing media and storing other information. By default, it is located in the Collection-Files directory of your installation directory. Alternately, you can choose a different directory.

Clicking Next from the Collection Data Directory panel will invoke the installation process itself.

Launching Insight Studio

Unlike the Insight Java Client or Inscribe, you must log into Insight Studio with an Administrative Username and Password (as specified at installation time, or one created using the Insight Administrator Tools). For more information on creating Administrative Users, please see **Managing Administrative Users** on page 110 of this manual.

Quick Start

Insight Studio is separated into a series of task-based actions. Each action represents one aspect of creating and managing a Collection.

These tasks include:

- **Creating a Collection (see page 26)**
Name and describe the new Collection, choose a Cataloging Template to define the data structure, design a theme (background image and color scheme), and create the Collection.
- **Creating a Cataloging Template (see page 36)**
Start with an existing Cataloging Template or start from scratch, define the metadata structure that will hold all descriptive data to be linked to the media in your Collection.
- **Importing / Processing Media (see page 66)**
Import your media into the Insight environment by having Studio build the suite of derivative images (optimized images for every size that Insight displays) and link your media to your data.
- **Importing Metadata (data records) (see page 54)**
Map your source data to Insight's data model and import it into the Insight structure.
- **Managing User Access (see page 87)**
Decide who should have access to the Collection and what kind of access they should have.
- **Modifying an Existing Collection's Properties (see page 102)**
Insight Studio builds new Collections. Insight Administrator Tools are designed to modify existing Collection's Properties.
- **Creating a Virtual Collection (see page 186)**
If you only want to share part of a Collection, or if you want to organize a Collection into smaller sub-Collections, create Virtual Collections.

Common Terms and Definitions

Collection

Each Insight Collection Manager can contain one or many Collections. Each Collection is a logical organization of content sharing the same Cataloging Template.

Virtual Collection

A Virtual Collection is a subset of a Collection that is displayed as its own Collection by the Insight Java Client, BrowserInsight, and XML Gateway.

Media Group

A Media Group is a logical organization of objects and images. Both Collections and Virtual Collections are unique types of Media Groups.

User Group

A User Group is a logical organization of Users with shared permission settings and authentication rights for a specific Collection. User Groups are matched with a private Code Key which allows access to a Collection (via an access Profile).

Profile

Profiles control access and permissions for Insight and Inscribe, from maximum viewable image sizes to image export sizes, etc.

Field & Record Field

Fields are the base data components in Insight. Fields can be organized for display in Field Groups. Record Fields are the Inscribe equivalent of Fields. Record Fields are organized by record types.

Field Group

Field Groups are used to organize Fields within Insight's Data Window.

Record Type

Record Types are the logical grouping of Fields for data entry.

Cataloging Templates

Cataloging Templates represent the fields, groups of fields, and field properties for the Insight Client and Inscribe. Cataloging Templates control all data-level interactions within Insight. This includes data validation, data types, grouping, linking, quick-search fields, cross-Collection searching properties, source-table write-back, and other data-related properties of BrowserInsight, the Insight Java Client and Inscribe.

NOTE: For those familiar with the Insight Administrator Tools, Cataloging Templates are the union of:

- Fields
- Field Groups
- Record Fields
- Record Types
- Record Relationships
- Field Standards

Standards Mapping

Standard Mappings enable Insight to map content between Collections with disparate data structures by allowing the correlation between the local standard (that of the current Collection) and an external standard (that of another Collection).

Object IDs & Media IDs

Objects and media records form the foundation of Insight. Each object in Insight represents a unique record in the data editor or row in the source data. Each media record represents a unique item of media that has been imported into Insight. Each object and media record contains a unique ID. Together, these ID's represent the fundamental elements of Insight.

NOTE: For Collections that maintain source-table write-back, Object ID's are tied directly to the unique row ID's of the database table.

Object ID's and Media ID's are used throughout Insight and are preserved even after indexing, re-indexing, and other tasks – ensuring that records and media maintain their relationships over time.

Media Processing

Media processing is built around the import of source media files and the creation of JPEG and Wavelet (MrSID & JPEG2000) derivatives for use in Insight.

Media Batches

Media Batches are organizational tools which allow administrators to control and manage content. Batches are organized chronologically and are commonly used to group content imported at a specific time. Once created, batches can be used to review and update links for previously imported content.

Importing Data

Insight has three methods for importing data:

Manual Data Input

Data can be manually entered using Insight's cataloging tool, Inscribe.

Bulk Data Import

Bulk data import can be performed using Insight Studio. Current data formats include simple delimited data sources such as tab (.TAB) or comma-separated (.CSV) data.

Published View of External Data Tables

In some cases, institutions use Insight as a portal for existing data sources. For example, they may attach visual resources onto an existing library system or other database model. To accomplish this task, you will need to combine the resources of Insight Studio and Insight Administrator Tools, which will enable you to index content from the external source and import it into Insight. Optionally, Insight can be configured to write any changes made in Inscribe back out to those external tables.

Planning a New Collection

Before creating a new Collection, it is best to spend some time planning. Here are some questions to consider. Think about them and plan before creating your Collection:

What sort of content do you have? What sort of metadata? Who will use the Collection and how? How will the Collection grow? How will images and media be contributed? Are they being scanned? Imported from a digital camera? Created digitally in Photoshop? Will they come in batches or one or two at a time? Is there Multimedia? How large will the images or multimedia be? How will the metadata be created? Will it come from text files, comma-delimited, tab-delimited, XML, or perhaps Excel formatted files? Will metadata be entered by hand via Inscribe or will it come from a read-only database? Determine if the data is technical in nature, process-oriented, minimal, or complex. How is it created? What are the processes that it undergoes (is there a validation or data integrity process)? Do you use controlled vocabularies or external hierarchies? What types of fields do you use (numeric, text, date)?

The following sections will assist you to think about these issues and plan your Collection.

Designing a Metadata Structure

There are many metadata standards for cataloging visual and non-visual media, including the VRA Core, MARC, Dublin Core, CDWA, Object ID, CIMI, and EAD. Each of these standards has benefits and drawbacks; some are more suited for describing books, others for slides, others for complex objects or multimedia, etc.

Think about how the data is organized and what you want to do with it. Your specific needs will inform your choice of cataloging standards.

Below is a list of resources where you can learn more about data standards:

- **Introduction to Metadata - Metadata Standards Crosswalk**
<http://www.getty.edu/research/institute/standards/intrometadata/>
- **Categories for the Description of Works of Art (CDWA)**
<http://www.getty.edu/gri/standard/cdwa/>

- **The CIMI Profile**
<http://lcweb.loc.gov/z3950/agency/profiles/cimi2.html>
<http://www.unt.edu/wmoen/projects/Z39.50/cimi/Profile/appendixc.htm>
- **Dublin Core Metadata Element Set Version 1.1**
<http://purl.org/DC/documents/rec-dces-19990702.htm>
- **CIMI Guide to Best Practice: Dublin Core, Version 1.1**
http://www.cimi.org/public_docs/meta_bestprac_v1_1_210400.pdf
- **MARC 21**
<http://lcweb.loc.gov/marc/>
- **Object ID Project**
<http://www.object-id.com/>
- **VRA Core Categories, Version 2.0**
<http://www.oberlin.edu/~art/vra/guide.html>
- **VRA Core Categories, Version 3.0**
<http://www.qsd.harvard.edu/~staffaw3/vra/vracore3.htm>

Components of a Cataloging Template

A metadata schema or Cataloging Template represents the way that data is organized within a Collection. A Cataloging Template consists of a set of fields or groups of fields which represent one complete record. Described a different way, a Cataloging Template represents the most complex data record that you plan to catalog.

More specifically, the components of a Cataloging Template are:

Fields: Fields are the simplest units that can be cataloged, such as names, dates, or simply text.

Records or Field Groups: Records are groups of fields and represent how data is organized either for display or logically grouped for cataloging.

Object Records: An object record represents a complete data record in Insight.

Fields

Fields are the lowest-level building blocks of a data structure. Each field represents one unique section of data. Fields can be Numeric, Short Text, Long Text, or IDs. Multiple Fields can be combined to create Field Groups and Records.

Field Validation

Depending on a field's use or content, it may be important to restrict input of certain types of information. Field Validation Rules enable the Insight Administrator to require users to input valid data into a given field within Inscribe.

Insight Studio enables an administrator to add different types of validation rules, including checks for required fields, numeric and numeric range validation, verification against an external hierarchy such as the Getty's AAT, and date validation.

Special Validation – Controlling Access by User Rights

For more complex data input scenarios, administrators can control not only the validation of the content that is added via Inscribe, but also whether a given user can see, add, delete, or change data. This granularity of rights is often useful in managing controlled vocabularies, by allowing an administrator to only enable specific users to add new entries.

NOTE: To enable this feature, you will need to use the Insight Administrator Tools.

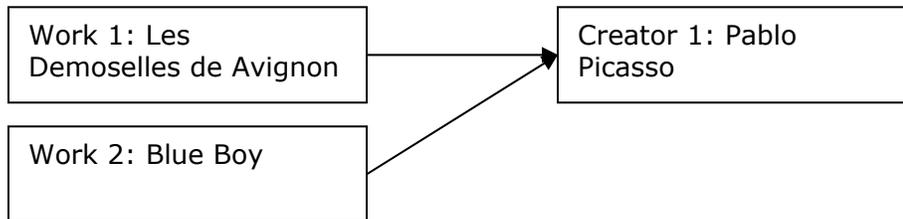
Field Groups and Record Types

Field Groups and Record Types enable you to organize common content for display and data entry. Record Types represent groupings of fields within your metadata schema. Field Groups represent groups of fields organized for display. In many cases, both Record Types and Field Groups contain the same fields; when building data models within Insight Studio, for example, creating a Record Type will create a corresponding Field Group.

What are the logical pieces of your metadata model? Think about how you organize your records. Are fields grouped? Do they repeat? What's special about them? Does a set of fields pertain to a creator? What do they do? How should they work? Field groups and record types represent the substructures of a given record, with fields as the base components.

Independent Records (Unique Records)

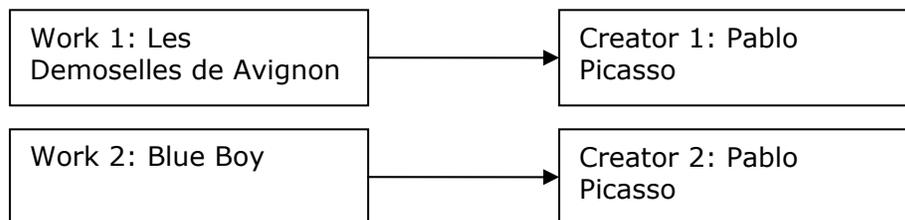
Unique or Independent Records should be used when data fields are related more to each other than the main (object) record. For example, a single creator record may be created to describe an individual artist (say Pablo Picasso), but it will be linked to multiple object records. The independent record enables catalogers to access and manage this information separately from the object record (accessible from the File | Open Record menu option in Inscribe). The object record is a special type of Independent Record.

Figure 1: Independent Record Diagram

In the example above, both Work Records (Work 1 and Work 2) link to the same creator information. If the Creator Record (Creator 1) is updated, both records will share the updated data.

Dependent Records

Dependent Records duplicate data and are merged into the parent record (in many cases, this is the base record). A metadata architect might use dependent records for something like a Work Title where a unique title needs to be created for each object instead of linking each record to a unique title record. Dependent Records can also be used to allow a field to repeat, by placing only that field within the record. Dependent records are not displayed in the form selection list in the File menu of Inscribe.

Figure 2: Dependent Record Diagram

In the example above, Work 1 links to Creator 1 and Work 2 links to Creator 2. If data is updated in Creator 2, then it will only be visible in the data for Work 2.

Controlled Vocabularies

Controlled vocabularies are a special type of independent record. Like independent records, they maintain unique values, but can only contain one field. Like dependent records, within Inscribe, they do not show up in the File | Open Record menu.

Object Records

An Object Record represents one complete record in the data schema. If you were cataloging slides, it would describe the data for one slide. Object records are paired with images, or are associated to create Multi-Page Documents.

Search & Data Display Properties

By default, all fields in Insight are searchable and displayed within the data. However, some fields may not be useful for searching, and some data fields should be visible only to the catalogers. Sometimes data fields should be displayed, but not searched, or searched but not displayed.

Some examples might include:

- Fields that shouldn't be seen or searched (a cataloging Notes Field).
- Fields that should be seen but not searched (a type qualifier such as a measurement unit).
- Fields that should be searched but not seen (the numeric versions of dates or OCR text).

When creating your Cataloging Template, you have the ability to specify whether a field is searchable or not.

NOTE: You can always change this at a later date, using the Insight Administrator Tools.

Considering Common Search Fields (Quick-Search Fields)

Quick-Search fields are offered as an easy way to search a Collection. They are intended to provide guidance to users about useful ways to search a Collection for specific records (i.e. the who, what, where, why, and how of your Collection).

How do you expect people to search for images or data within your Collection? What are the common fields that people will want to search by? Users may not want to search on repository name – especially if the repository is always the name of your institution.

Pulling it Together – Creating a Metadata Map

There is a lot to consider when creating a Cataloging Template or metadata schema. Take the time to map out your Template before going any further, and test your Template by cataloging a few records by hand.

This exercise is intended to see how well your data is represented in the metadata schema, and to see if the schema can hold up to the data you've cataloged. If necessary, adjust the metadata schema to support the record sample.

Workflow and Metadata Creation:

Workflow is central to all tasks. However simple, all institutions and projects have a workflow. Workflow encompasses image processing, cataloging, data review, image review, and use. Workflow is the outgrowth of institutional policy, efficiency, availability of resources, as well as controllable factors.

When thinking about workflow, it's useful to consider:

How is your content created (metadata and media)? Is there a review process? Are there many individual catalogers and a supervisor? Are your images scanned or imported before entry of metadata or after? Do you generally process content in batches or catalog one item at a time? If the content is cataloged ahead of time, what format is it in?

Choosing the Best Tools to Fit your Workflow

Workflow is also important when understanding how to make best use of the tools provided. When planning to import content into Insight, it is important to understand how the tools manage the content and how to make best use of those tools. Within Insight, workflow is broken into three different stages: Data Import, Media Processing, and Record-to-Media Linking.

Tool	Data Import	Media Processing	Record-to-Media Linking
Inscribe	Manual Cataloging	NO	YES (manual)
Insight Studio	YES, bulk data import	YES (JPEG2000)	YES (using linking files)
Administrator Tools	YES, from existing DB using Indexer	YES, MrSID & JPEG2000	YES (manual & using linking files)

Creating a Base Record Template

One of the fastest ways to build a collection and have it available within Insight is to create a Base Record Template. A Base Record Template contains the set of fields with your data which are common to all data records, plus any information to map the media to the data record. This could include the image filename, copyright statement, unique ID, institution name, notes, processed date, or other information. See example below.

Sequence #	Image Name	Copyright Statement	Processed Date
------------	------------	---------------------	----------------

1	Image0001.jpg	© my institution	March 5,2004
2	Image0002.jpg	© my institution	March 5,2004
3	Image0003.jpg	© my institution	March 5,2004

Working in Small Batches

If you plan to catalog records, import data, and import media in small batches (under 50), then you can:

- Import media in Insight Studio first, cataloging and linking records later in Inscribe.
- Import data from a completed Base Record Template, and then import & link media.
- Import data first, importing and linking the media in bulk later using Insight Studio.

NOTE: Using batches it is possible to import media before you import data. Once the data has been imported, simply modify the batch, apply the linking file, and re-publish the records.

If you import content in large batches (100+)

If you have large batches of content to import, perhaps delimited text files, then it is best to import the metadata and then the media. After importing the data, it will be possible to review it within Inscribe. If the data is correct, use Insight Studio's media processing tool to process and link the data using a mapping file. The batch-linking section of the media processing tool will allow you to map the Object Records and Media Files and review the mappings before they are published to the Collection.

NOTE: Using batches, it is possible to import media before you import data. Once the data has been imported, simply modify the batch, apply the linking file, and re-publish the records.

More Complex Workflow Situations

Insight also supports more complex workflow situations. You may have a database that is used for both Insight and other applications. You may have procedures where one group of users catalogs data that is subject to review by another group of users before publication.

If you have content in an existing database

If you have content in an existing database, then you could potentially make use of the Insight Administrator Tools Indexer. The Indexer allows Insight to draw content from a set of external data tables and represent that content within Insight.

Cases where you would use the Indexer:

- If you have a Collection with data published from another Database, but don't need Inscribe to update.
- If you have a Collection with data published from another database which you would like to use Inscribe to update.

NOTE: This is an advanced configuration that may be complex in some situations. Please contact Luna for more information on this configuration.

NOTE: If you have licensed the ability to create multiple collections, it is **STRONGLY** suggested that you install a special Collection Manager just for the collection you will use with this source data.

If you have different types of users importing and managing content

If you have different types of users with different responsibilities, then you can use field-level rights and permissions associated with the Approval Levels in the Insight Administrator Tools. Approval levels allow administrators to restrict end-users from creating, editing, deleting, or linking records – enabling a more dynamic workflow. Common uses include establishing permissions for entry-level users to enter data which is then held for review by administrators level users before publishing to the Collection.

Images and Multimedia

Insight is a visual tool, emphasizing the detail and quality of your media content while allowing you to organize and use it. Insight will take advantage of high resolution, archival quality media and facilitates the use of that content through the Java Client and BrowserInsight. Before creating your Collection, think about the format of your source images and multimedia content and how to best facilitate the use of that content within Insight.

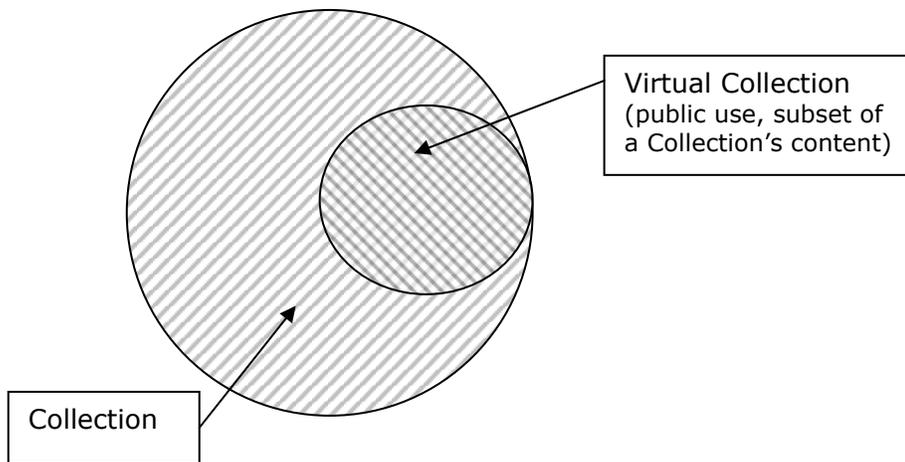
Many Insight customers find other uses for the derivative images that Insight creates for websites or other projects. Insight Studio creates up to six derivative files, depending on the size of the source image. Derivative sizes 0-4 (each doubling the size of its predecessor) are commonly created in JPEG format and stored in the Media Manager. Sizes 5 and higher are commonly created dynamically from the wavelet media file (JPEG2000 or MrSID). For a full list of image sizes, please see Table 14: Image Sizes In Insight on page 239.

NOTE: Using Insight Administrator Tools, media processing Profiles may be adjusted to create MrSID, JPEG2000, or JPEG files at the requisite Insight sizes.

Considering Virtual Collections

The Insight Java Client, BrowserInsight, and XML Gateway support the concept of Virtual Collections – the ability to separate a subset of an existing Collection into its own Collection. Virtual Collections enable institutions to select content from private repositories for public use, or to use a single metadata structure to support many sub-Collections.

Figure 3: A Visual Representation of a Virtual Collection



NOTE: Virtual Collections can be accessed from the Insight Java Client, BrowserInsight and the Insight XML Gateway as independent Collections. Though Inscribe can be used to view and maintain data in Collections that contain Virtual Collections, Inscribe does not recognize the Virtual Collections themselves.

Creating your First Collection

Once you have successfully installed and configured your Collection Manager, you are ready to create your first Collection. An Insight Collection consists of the following components:

A Cataloging Template: The metadata schema, search, and display properties you plan to use to for searching and displaying content.

A Theme: The visual appearance for the Insight Java Client and BrowserInsight. A theme includes a Collection's background image & background color.

Images & Multimedia: The full set of thumbnails and all derivative images and multimedia files.

Metadata: Information describing or supporting the media.

Types of Collections

There are two types of Collections within Insight: Basic Collections and Virtual Collections.

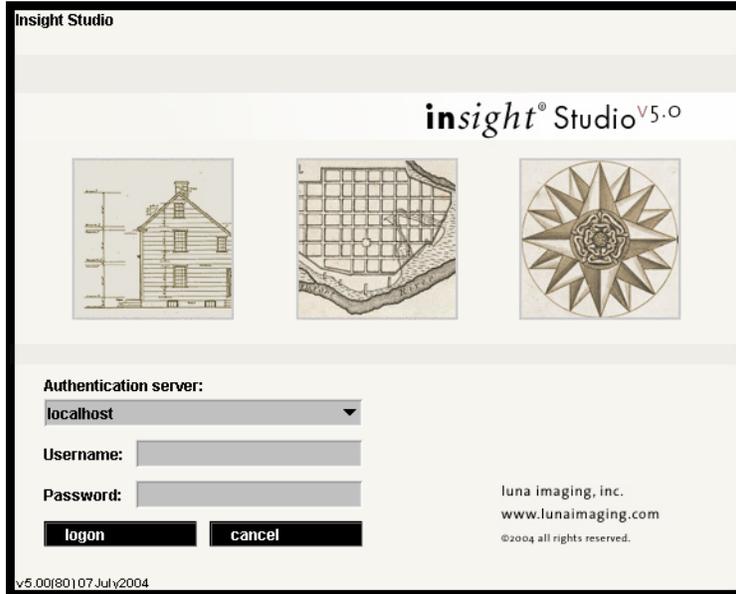
Basic Collection: Where source data content is created using Inscribe or the Insight Data Importer.

Virtual Collection: a logical subset of an existing Collection.

Log into Insight Studio

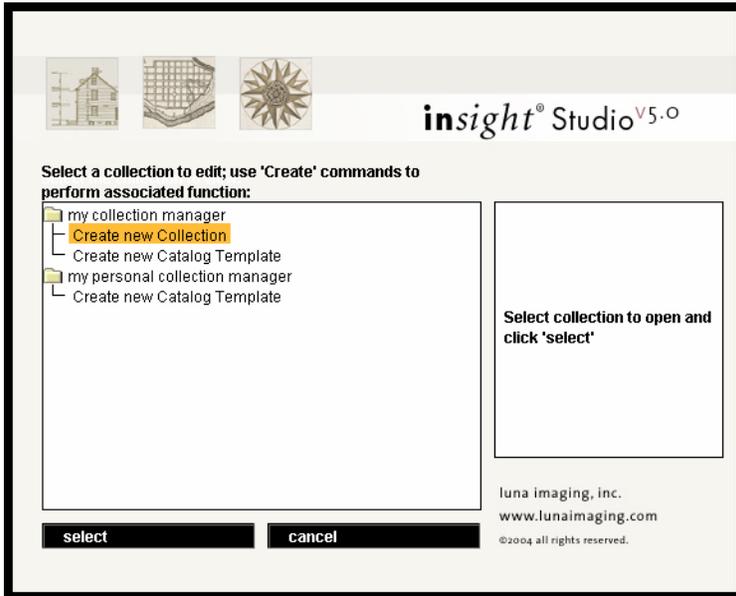
When logging into Insight Studio, use an Administrative username and password.

Figure 4: Insight Studio Login Panel



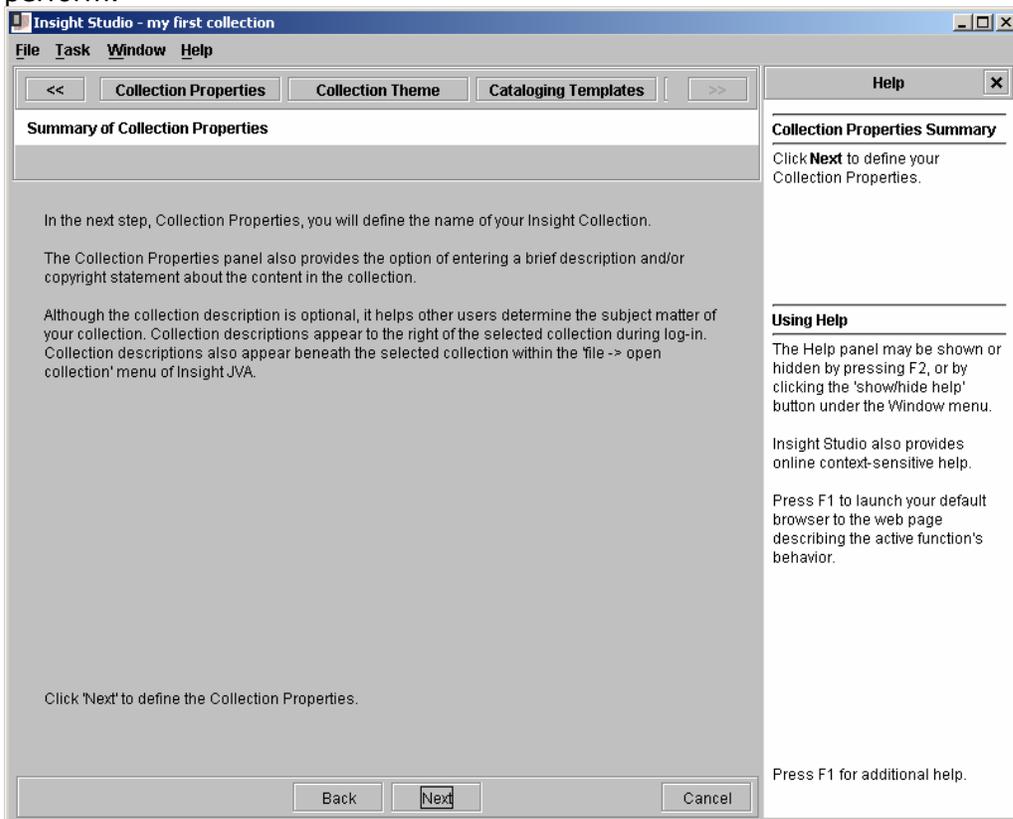
Collections belong to a Collection Manager. A Collection Manager may contain many Collections. Select the Collection Manager that is to contain the new Collection and choose Create new Collection.

Figure 5: The Insight Studio Collection Selection Panel



Overview

Once you choose an action, Insight Studio will present an overview of the tasks you will perform.



General Properties – Name & Description

The first step in building a Collection is to choose a Collection Name and provide basic information about it. The general description will be displayed in the Insight Login panel while users are choosing a Collection to open – you should provide a description of your content that a user unfamiliar with your Collection will be able to determine the contents of your collection.

You can also provide a URL for more information on the Collection and a copyright statement that will be printed when users export content from Insight.

The screenshot shows the 'Insight Studio - my first collection' window. The 'Collection Properties' tab is active, displaying a form to define collection properties. The form includes the following fields:

- Collection Name:** my first collection
- Brief Description:** this is my first collection
- Collection Website:** http://www.lunaimaging.com/
- Copyright Statement:** (empty)

The 'Help' window on the right provides additional information:

- Defining Collection Properties:** The Brief Description, Collection Website, and Copyright Statement values are optional and may be added or modified after collection creation.
- User Interface Tip:** The status bar, located immediately below the title bar, will indicate the item requesting your attention. An alert message will appear when a required value has yet to be defined or the value is invalid. For example, if a collection name has not been defined, the "Please enter a collection name" message will appear. The status bar is also used to indicate processing activity.

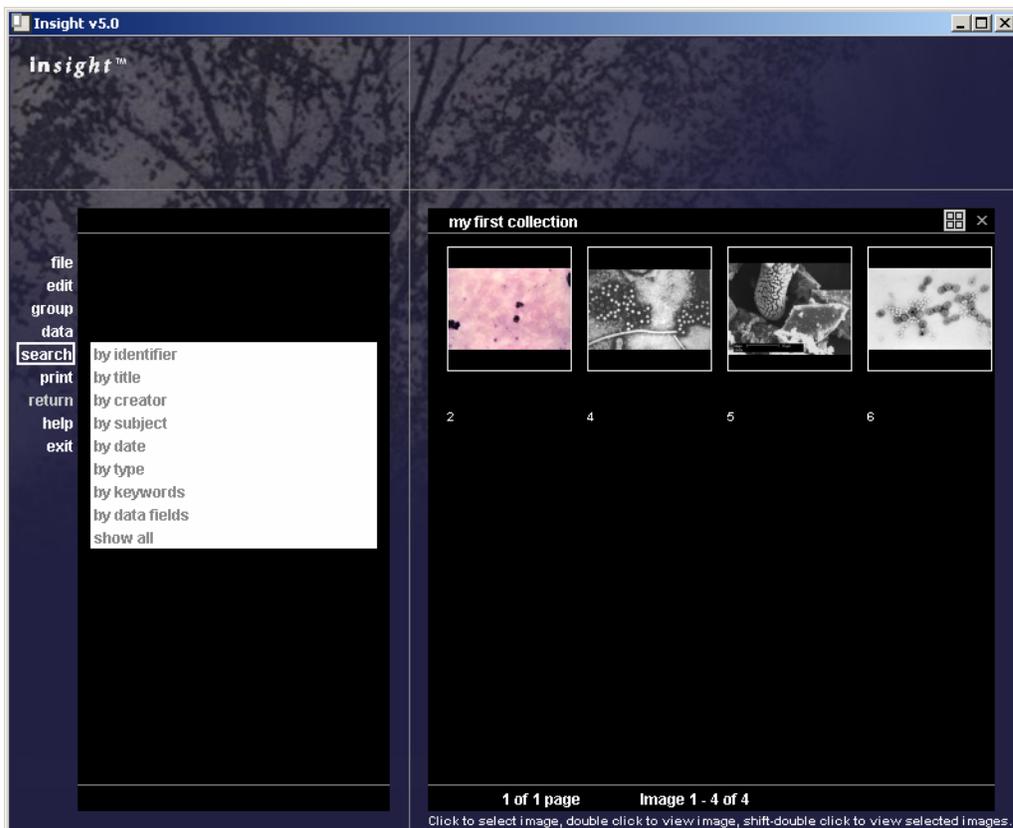
At the bottom of the dialog, there are 'Back', 'Next', and 'Cancel' buttons. A note at the bottom right of the help window says 'Press F1 for additional help.'

Choosing a Theme

Once a theme has been created, it is saved locally on your machine. It can be reused if desired.

When provided with a background image, Insight Studio will add the Insight Logo and cross-hairs that visually divide the Group Workspace into panels, and it will upload the image to the server. Insight Studio will also make all of the necessary images for BrowserInsight to display the image properly. An example is provided below.

Figure 6: The Insight Group Workspace with a Background Image



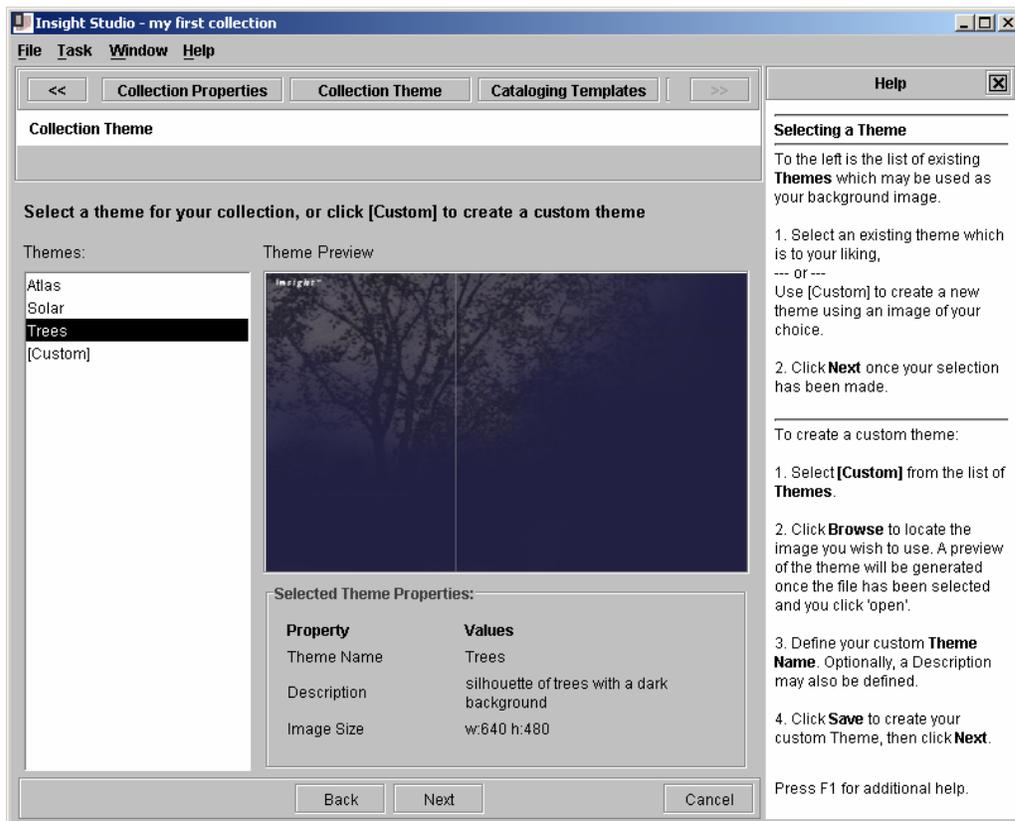
NOTE: If you would like to further customize your background image or change the background color, use Insight Administrator Tools. See Collection Backgrounds in Insight 5 on page 196 for more information.

Creating a Custom Theme

Insight uses an 800 x 600 pixel image as a basis for a themed background that appears in both the Java Client and BrowserInsight. The background image is placed in the upper left corner of the screen (as seen in the example above). Any space not covered by the background image will be automatically filled with the color from the bottom right corner of the background image (making the bleed between the two as close to seamless as possible).

NOTE: If your image is not 800x600 pixels Insight Studio will scale the image to fit and then crop the bottom section as needed.

To create a new custom theme from your background image, select Custom from the theme list.



Choosing a Background Image

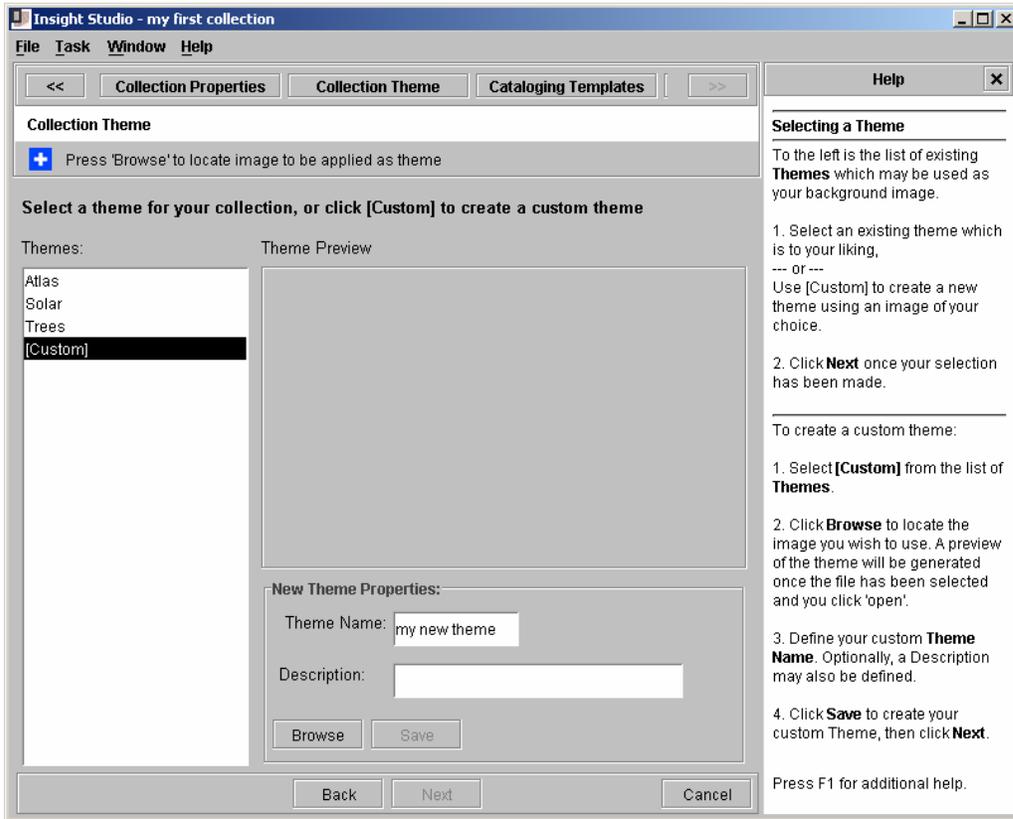
An Insight background image consists of an 800x600 pixel image placed behind the group workspace (as shown in Figure 6: The Insight Group Workspace with a Background Image). For the most part, only the top left corner and top 100 pixels of the background image will be visible to the user; the rest will be covered by the Group Workspace. When choosing a background image, plan accordingly.

Before you create the theme in Insight, you may choose to edit it within Photoshop to ensure good results:

- 1) Select an Image for your custom theme open it in an Image Editing application like Photoshop.
- 2) Choose a background color which compliments your image.
- 3) Blend the bottom and right edges of your image with the background color.
- 4) Save the image.

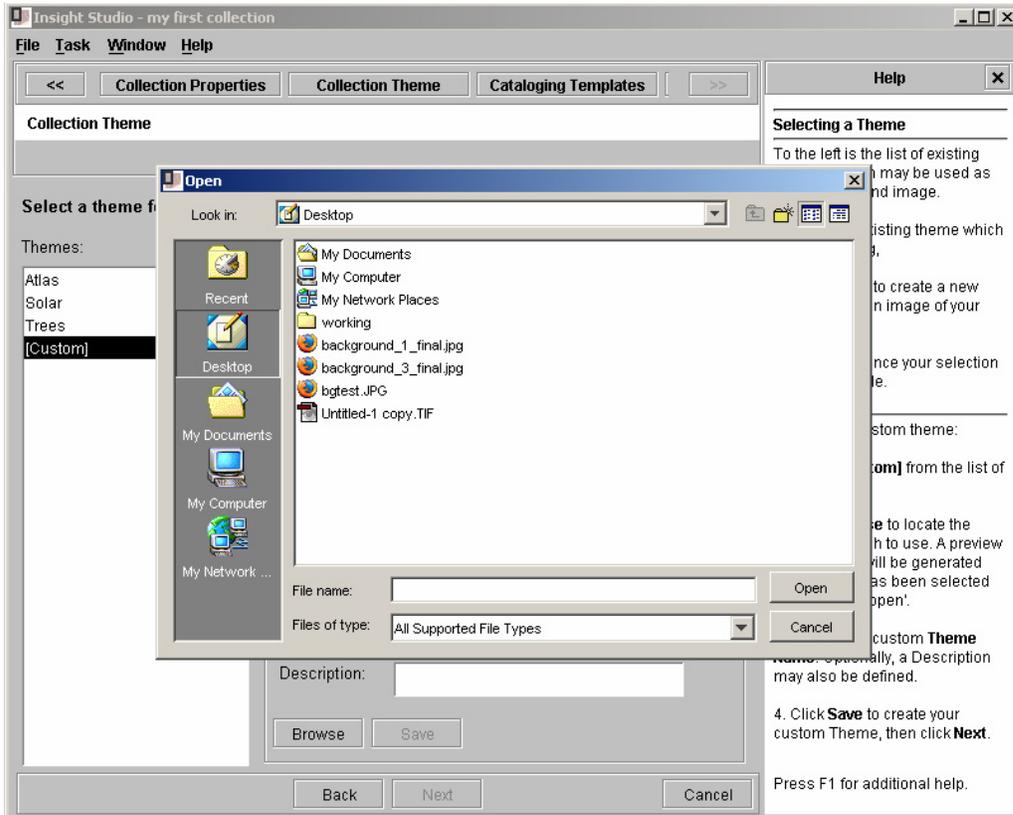
NOTE: A custom Photoshop template with the appropriate information is available in the utilities directory of your Insight 5.1 CD.

NOTE: Valid File Formats include: TIFF, JPEG, BMP, and GIF.



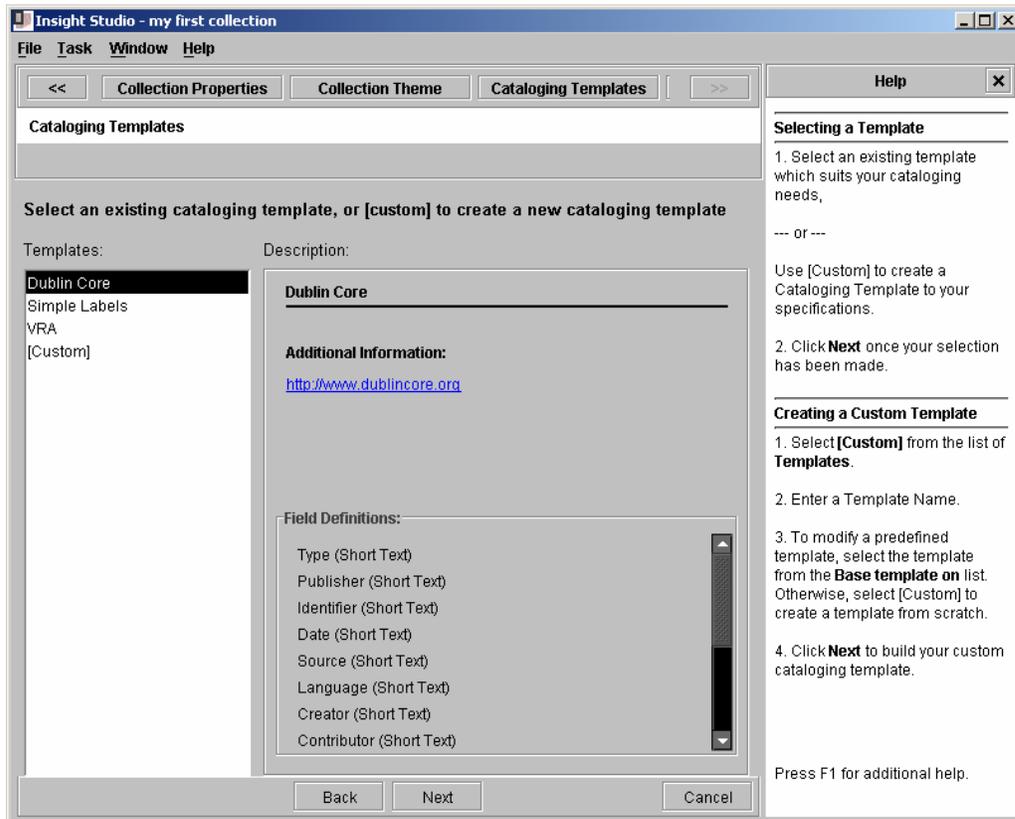
Adding your own Theme

Press **Browse** to select your background image. Once you have selected a background image, enter a Theme Name and Short Description to identify the theme you have created. Finally, save your theme.



Cataloging Templates

A Cataloging Template contains all of the information pertaining to display and use of metadata. In most cases, Cataloging Templates are maintained separately from Collections, allowing re-use across multiple Collections. Insight 5.1 ships with three optional custom Cataloging Templates: **Dublin Core**, **VRA Core 3.0**, and a **simple tables** Template consisting of five fields.



Cataloging Templates describe the metadata structure (fields, validation, organization), data display characteristics (how fields are grouped, labeled and displayed in the Insight Data Window, sorting defaults, and thumbnail labels), searching preferences (which fields are searchable and/or indexed), and cross-Collection searching information.

Choosing a Cataloging Template

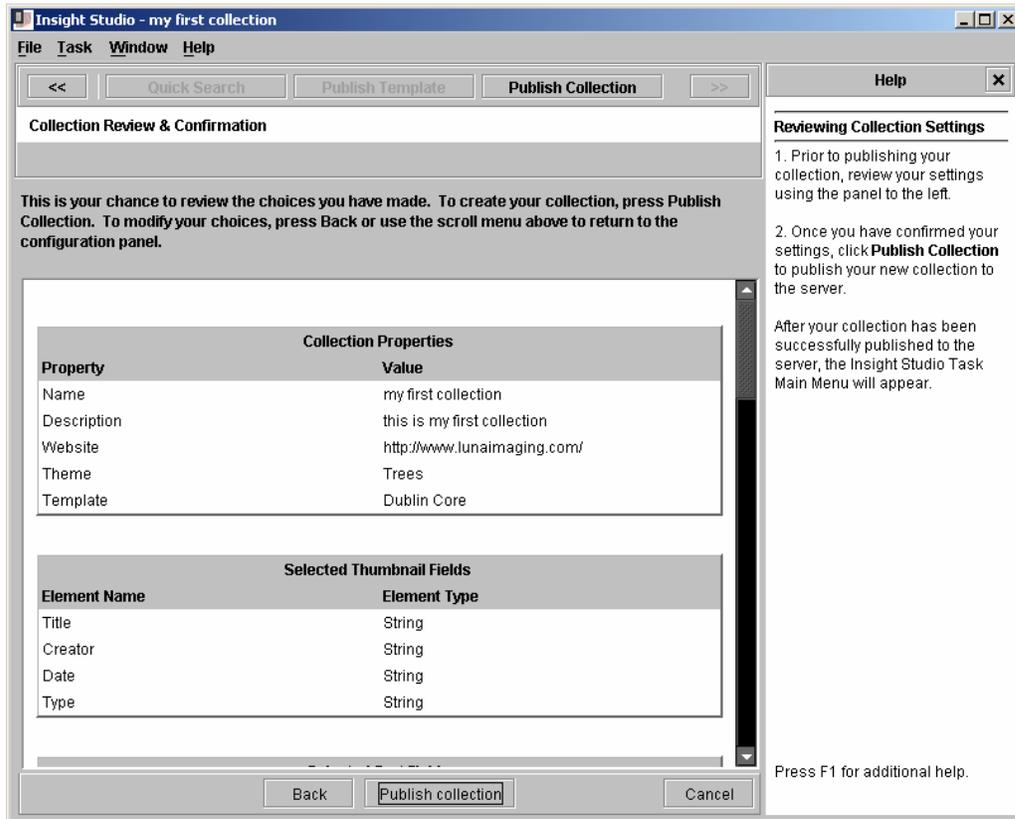
Either choose an existing Cataloging Template from the list or create a custom Template. For more information on creating a Cataloging Template, please see page 36.



When creating a Collection with source-table write-back or as a published view of an existing set of data tables, you must create a Cataloging Template specific to that Collection (because it must support the external table mappings). See Cataloging Templates and External Database on page 150.

Confirming the configuration before creating a Collection

Once the Collection's settings are finalized; Insight Studio provides one last chance to review the configuration before you publish your Collection.



Publishing your Collection

Once you have reviewed your settings, press Publish Collection to save the settings. You will then have an empty Collection, ready to be populated with media and data.

Next Steps

- Media Processing (see page 66)
- Importing Data (see page 54)
- Managing Users in Insight Studio (see page 87)

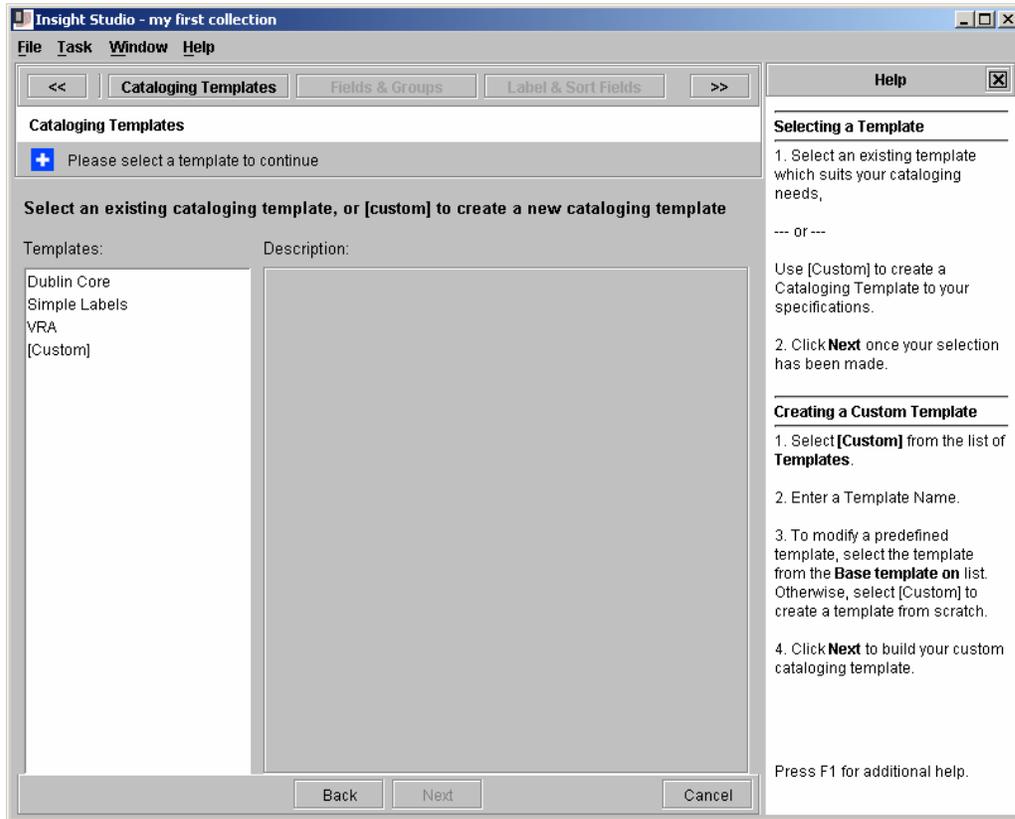
Creating a Cataloging Template in Insight Studio

Cataloging Templates manage all aspects of user interaction with a Collection's metadata model. A Cataloging Template consists of a metadata model, settings for searching and display, and data input preferences.

NOTE: If you haven't already read the section on planning a Collection, please review it, as it identifies key concepts used in creating a Cataloging Template.

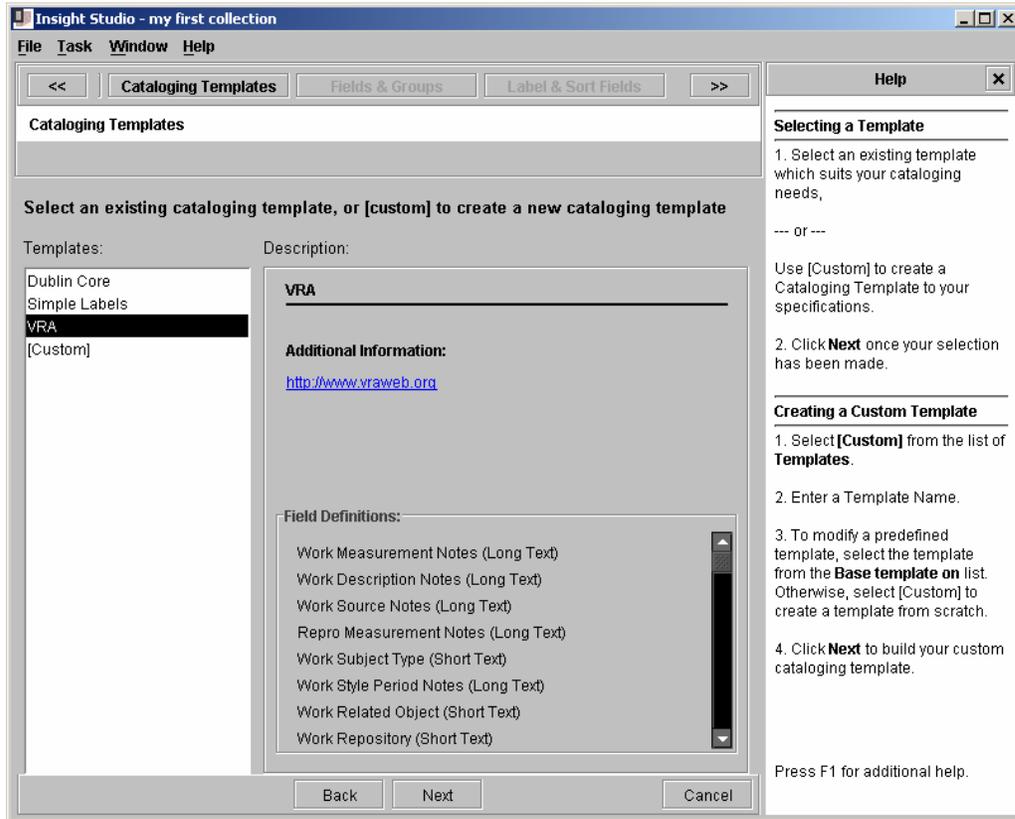
Getting Started

Launch Insight Studio and log in. Select the Collection Manager you'd like to use; and double-click Create a Cataloging Template.



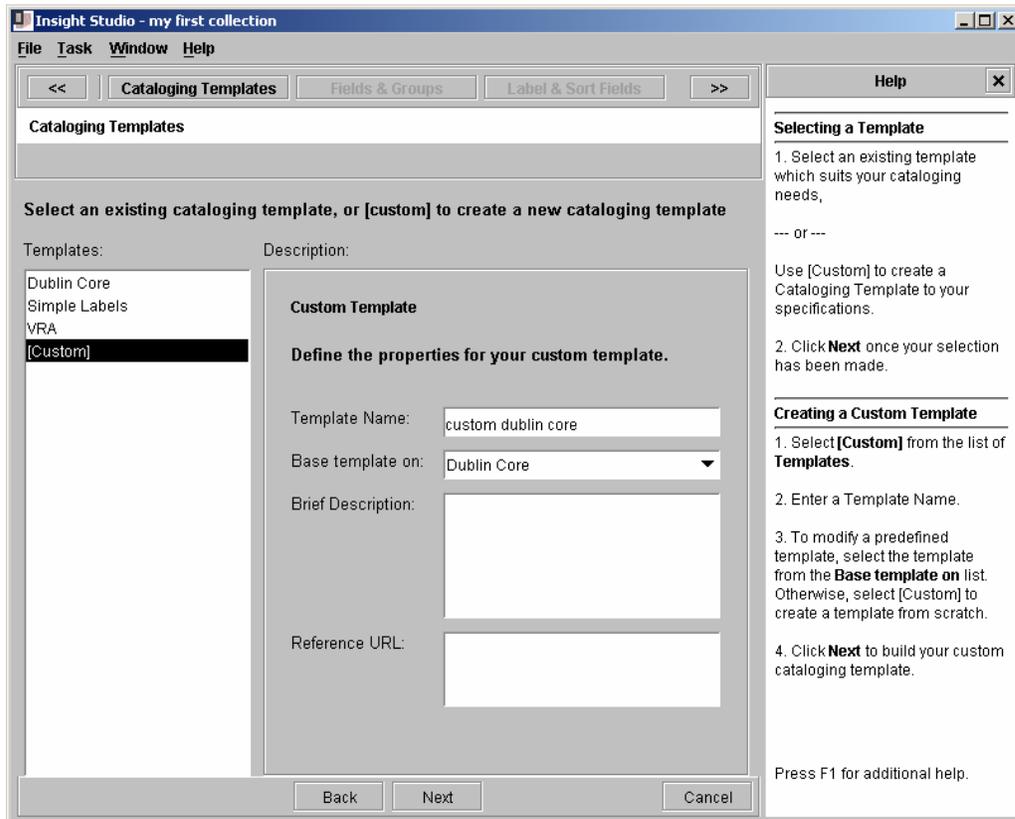
Reviewing Existing Templates

If you click on any Templates in the list on the left, a short description of the Template and a list of the Template's fields and properties are provided. Existing Templates can be used as a starting point for creating new Templates.



General Properties – Name & Description

Select [Custom] to create a custom template. Then, name your Cataloging Template, and add an optional description and / or URL for more information about the Template. The Template name should be meaningful to your users, as the name and other information is displayed in the data window in Insight client applications. The URL you enter will be added to the context-sensitive help in the Data Window.



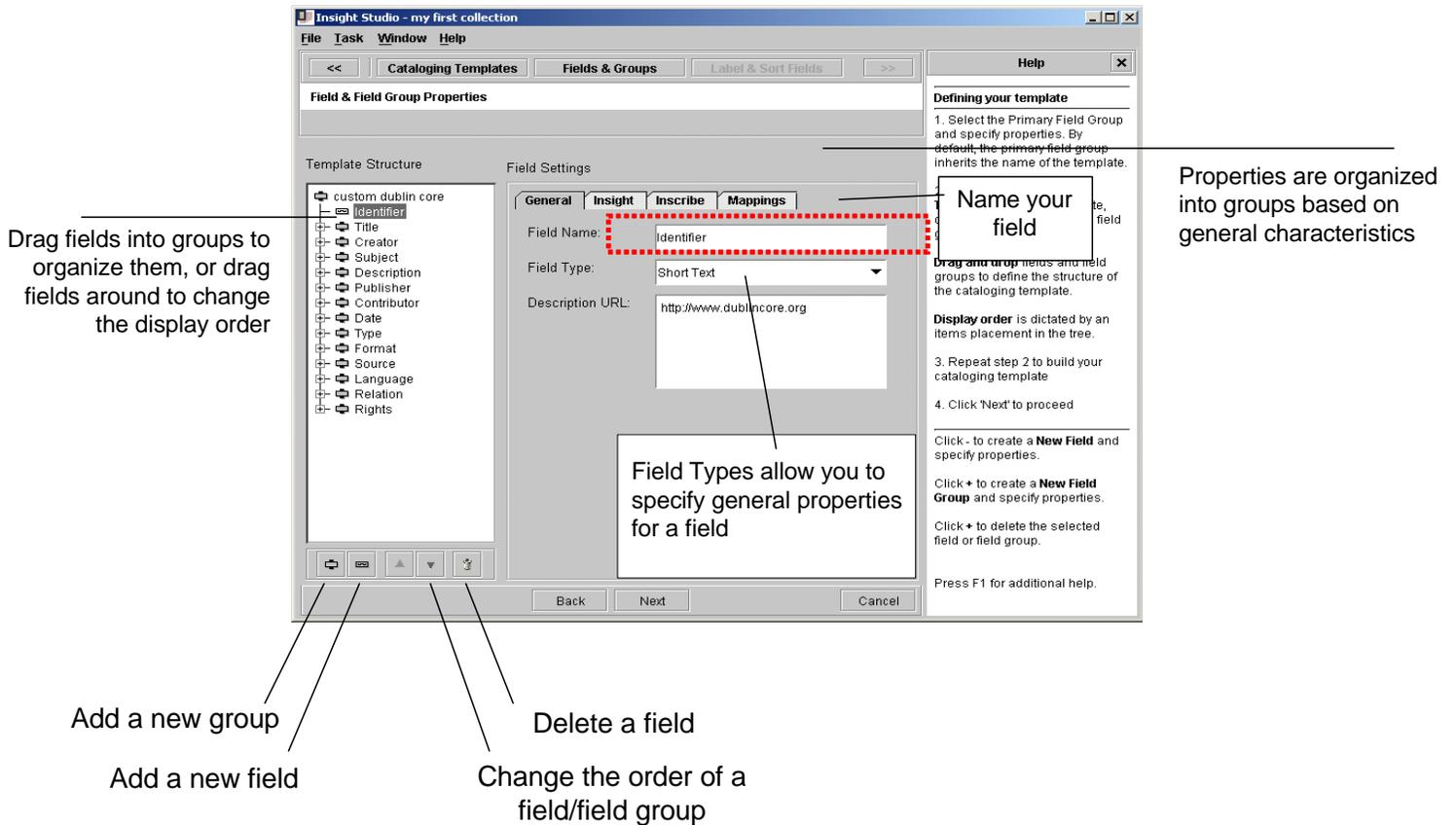
Basing a Cataloging Template on an Existing Template

Cataloging Templates are reusable. Allowing multiple Collections to share a Template simplifies the Collection creation process. Changing a Template affects all Collections using the Template. Fortunately, if an existing Cataloging Template is similar to the Template you plan to use for your Collection – perhaps different field display names, or you want to add a few more fields, you don't have to start from scratch. Instead, Insight Studio can optionally base a new Cataloging Template on an existing one.

To base your Cataloging Template on an existing Template, choose [Custom] from the Template menu (on the left), name the new Template, and choose the existing Template from the pull-down. When you are ready to create your Template, click Next.

Creating a Cataloging Template from Scratch

To start with an empty Template, choose [Custom] from the Template menu (on the left), and name the new Template. When you are ready to create your Template, click Next.



Introduction to the Cataloging Template Designer

The Cataloging Template creation tool is built around a double-paned window. On the left is a node-based representation of your fields and records. On the right are the properties of those fields / groups.

General Process for Creating Cataloging Templates:

- a) Create Fields & set Field properties
- b) Create Record Types & adjust Field properties
- c) Add Fields to Record Types

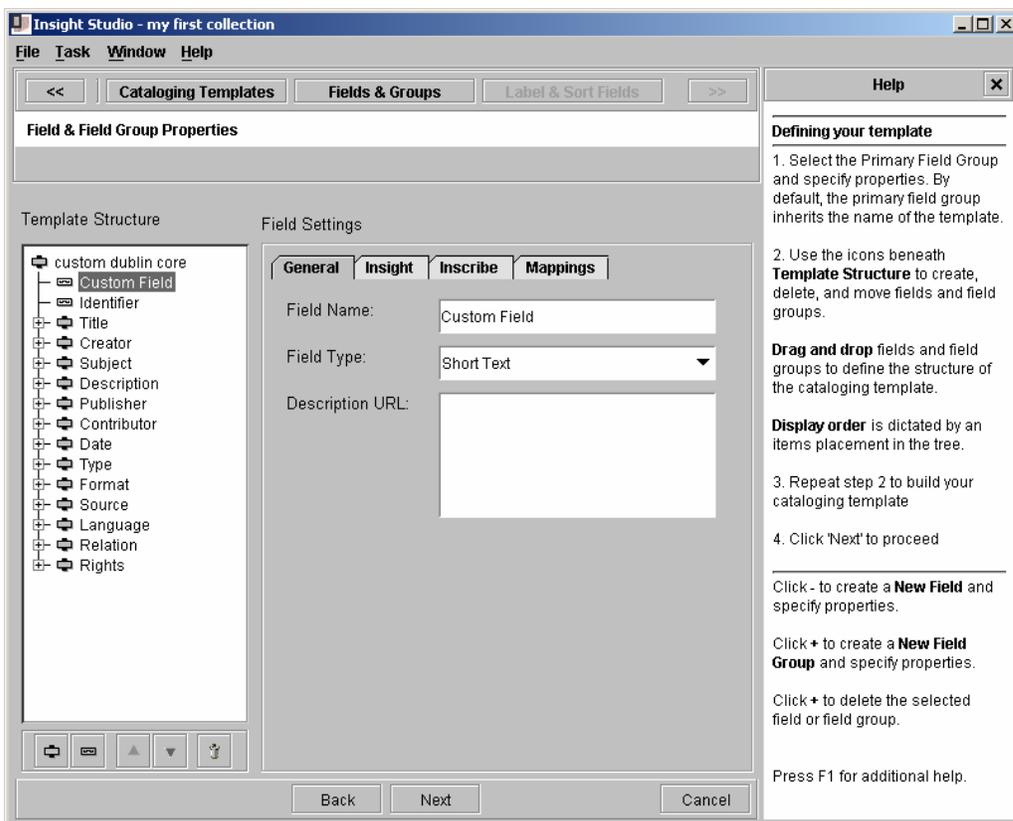
Adding a Field

To add a new field, click the  button. Name the field and choose a field type.

NOTE: Field names must be unique (though fields can be set to allow repeating values).

Setting General Field Properties

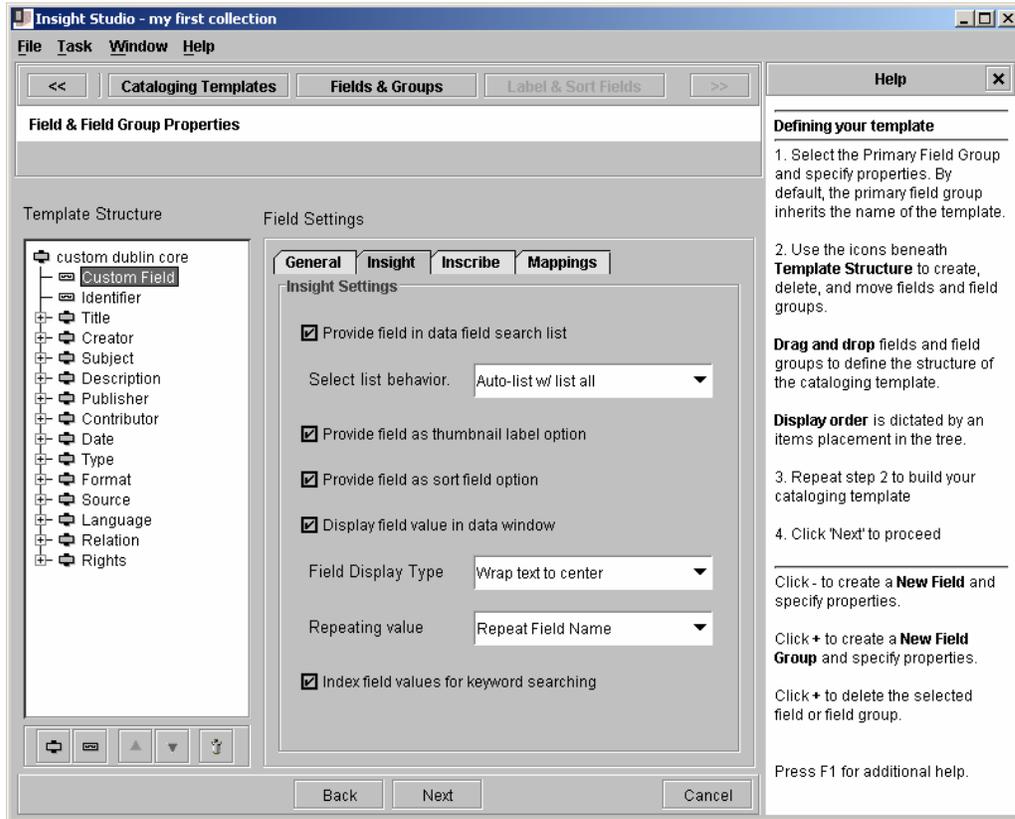
Insight Studio has five preset field types. Each field type has default property settings which may be customized. The field types are: Short Text, Long Text, Numeric, Unique ID, and Date.



For more information on the default settings for field properties, please see Table 11: Default properties for Insight Field Types on page 236.

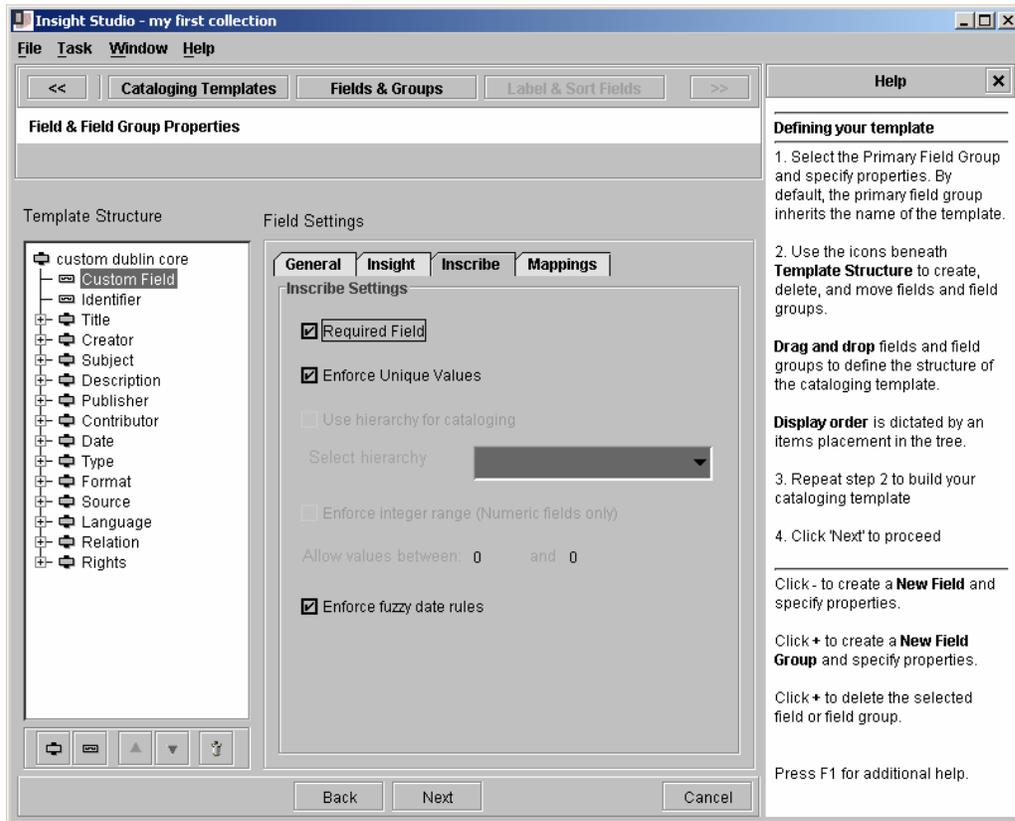
Insight Properties

Insight Properties control the display and search preferences for the field, defining whether the field is searchable, sortable, the behavior of select-lists during searches, and the display preferences for the field in the Data Window.



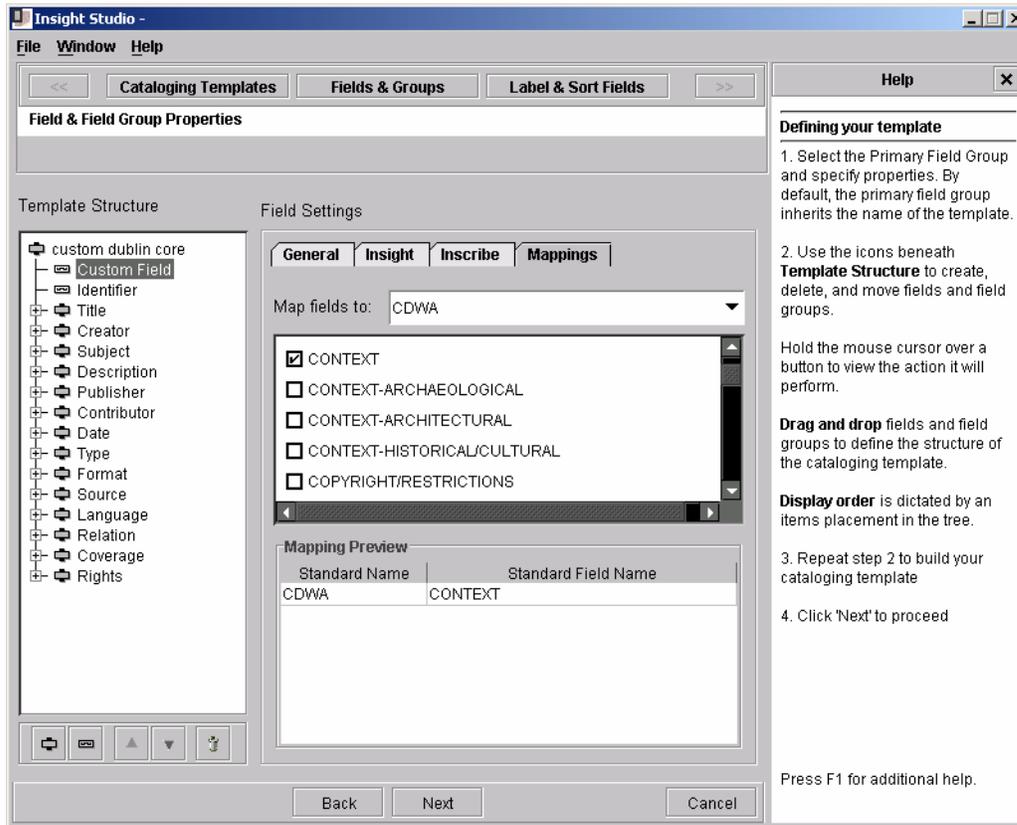
Inscribe Properties

Inscribe properties govern the validation of data input into Insight. This includes whether a value is required for a field, whether values must be unique, numeric, or a valid date.



Cross-Collection Searching Properties

Mapping fields in your Cataloging Template to fields in other Templates enables cross-Collection searching.



To map a field:

- 1) Select a field node in the tree, and choose the Mappings tab.
- 2) Select a Template to map to from the pull-down. Templates have varying levels of detail or complexity.
- 3) Select one or more fields from the other Template to map your field to them.

Creating Repeating Fields

You can create repeating fields by creating a dependent field group and placing the field within the dependent field group.

NOTE: Creating repeating fields using dependent entities ensures that you can enable “Source-table write-back” at a later date if you choose. If you would like to create repeating fields without a dependent entity, you can turn this feature on in the Insight Administrator Tools once you complete your Cataloging Template. (see Cataloging Templates and External Database on page 150 for more information)

Organizing Fields into Groups

Field groups (or records) logically organize data for cataloging within Inscribe, importing data, and displaying within the data window in Insight. There are three distinct types of field groups with different cataloging properties:

Independent Records (Field Groups)

Independent records are intended to maintain unique data – essentially authority files. This type of field group is useful for unique data within a record such as creator information, which is often entered many times, but pertains to just one unique creator. For more information on independent field groups please see Independent Records (Unique Records) on page 18.

Dependent Records (Field Group)

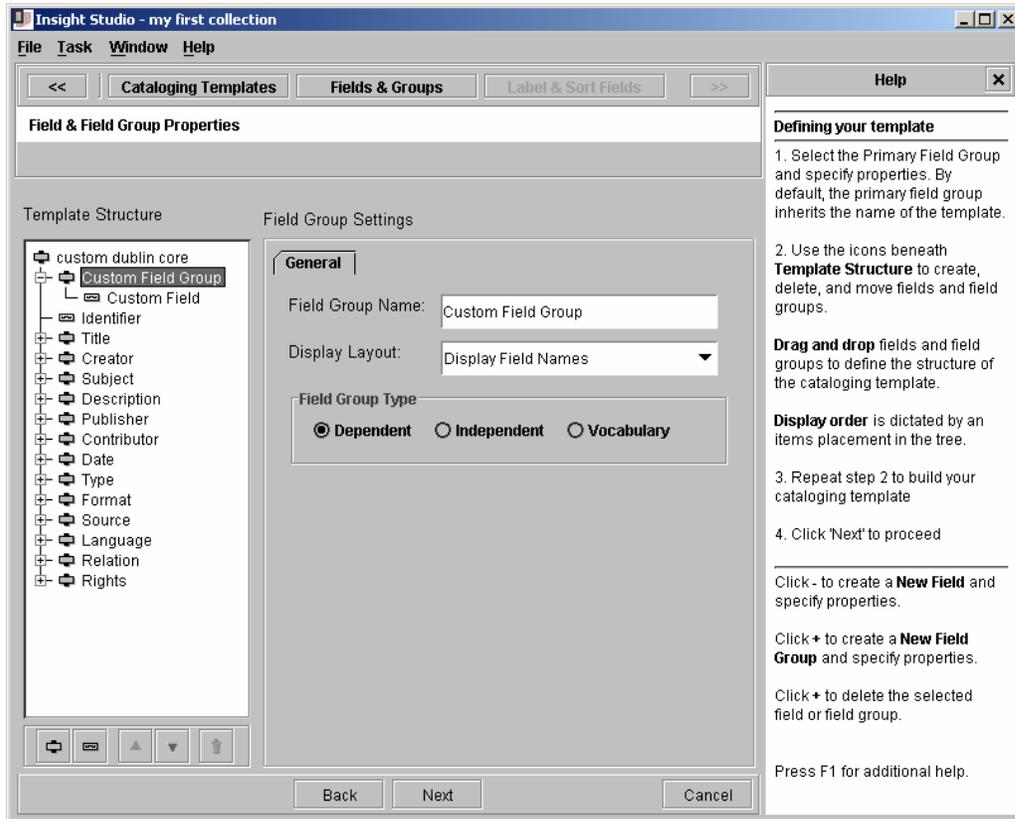
Dependent records store data that is not unique. If two records are cataloged with the same data, the data will be duplicated. This might be useful for records that contain title information (where values should always be maintained separately). For more information on dependent field groups please see Dependent Records on page 19.

Controlled Vocabularies

Controlled Vocabularies are a special type of independent field group which can only contain one field. These vocabularies are used to manage and maintain select lists within Insight or Inscribe. For more information on dependent field groups please see Controlled Vocabularies on page 19.

Setting Group Properties

Field groups have three main properties: name, type, and display layout. For more information on the field group types, please see above.



Rules for Field Groups

To help maintain data integrity, as well as ease of use, Insight Studio places specific rules on how fields and field groups can be organized.

- 1) All field and field group names must be unique within a Template. If you want to have the same name for a field and field group, a good compromise is to pluralize the field name in the field group.
- 2) Field Groups must have at least one field defined within them.
- 3) Dependent Records cannot contain Dependent Records. They can, however, contain Independent Records or Controlled Vocabularies.
- 4) Controlled Vocabularies can only contain one Field.

Choosing Field Group Display Settings

There are four display options for field groups.

Display Field Group Names

Displays the Field Group Name, followed by the individual Field values (without Field Names), one Field per line.

Example: **Artist Info:**
Pablo Picasso
1954
Spanish

Display Group & Field Names

Displays the Field Group Name, followed by the individual Named Fields, one Field per line.

Example: **Artist Info:**
Artist: Pablo Picasso
Artist Date: 1954
Artist Nationality: Spanish

Display Field Names

Displays each individual Field Name and groups the Fields together.

Example: **Artist: Pablo Picasso**
Artist Date: 1954
Artist Nationality Spanish

Single – Use Delimiter

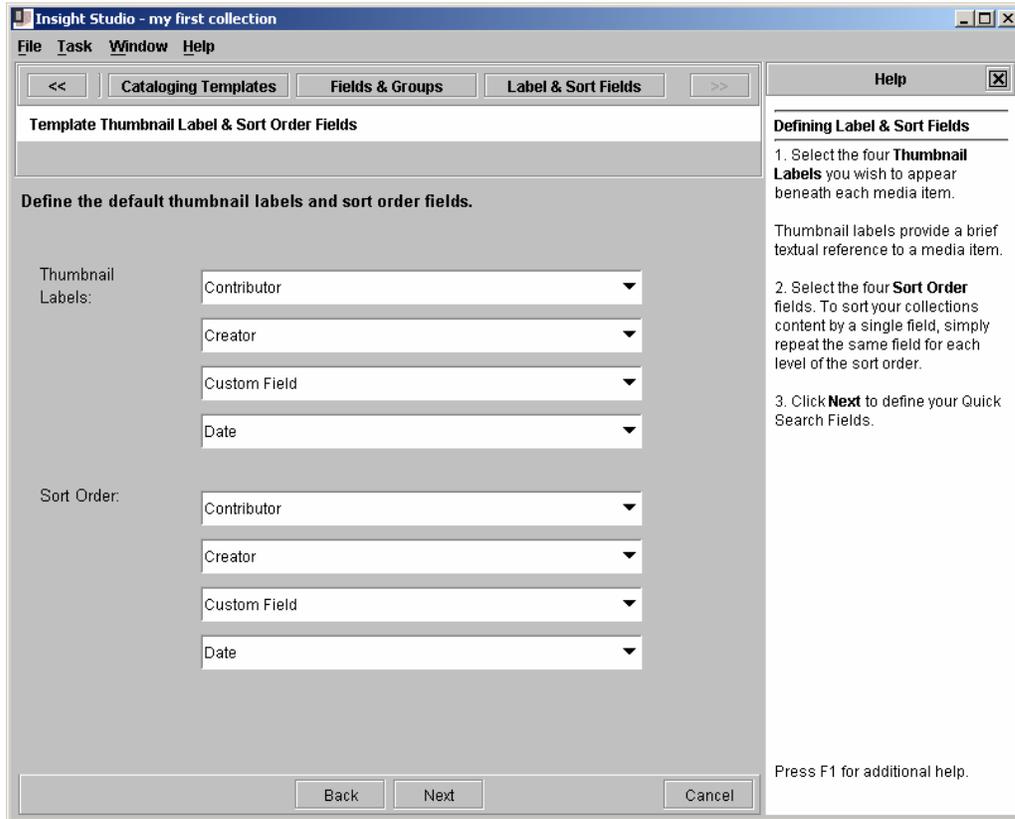
Used for a single Field that may have multiple repeating values.

NOTE: If more than one Field is selected, the delimiter cannot be used. Insight can only use the delimiter type you defined in the Field.

Example: **Artist: Pablo Picasso; Georges Braque**

Setting Sort and Thumbnail Fields

Sort fields define the default sort order for the overall Collection and search result sets. Thumbnail fields are displayed immediately under the Thumbnail image in the Group Workspace. Four Thumbnail fields must be selected.



Choosing Thumbnail Fields:

Thumbnail fields are displayed as labels below each image in the Group Workspace. Thumbnail fields are displayed for every record, so it is recommended that you select descriptive fields that most uniquely identify a record.

NOTE: When working with multiple Collections, the final thumbnail field will be changed to the Collection Name by Insight to identify the source of the record.

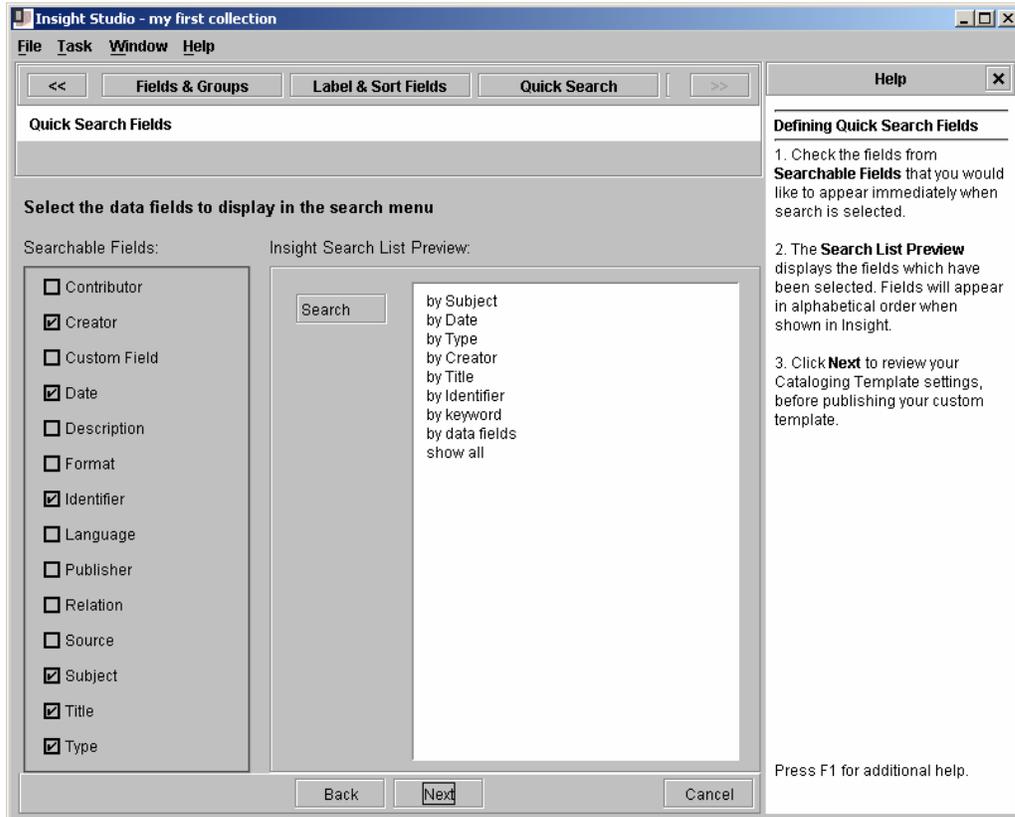
Choosing Sort Fields:

Choose four fields to sort your collection. All records sharing a value in the first sorting field will be sorted by the second field, and so on. Text fields are sorted ascending alphabetically, numeric fields are sorted numerically.

NOTE: Numeric values stored in text fields sort alphabetically, yielding results that may at first glance appear incorrect. For instance, the sequential series 1,2,3,10 will sort as “1”, “10”, “2”, “3” if stored and sorted in a text field.

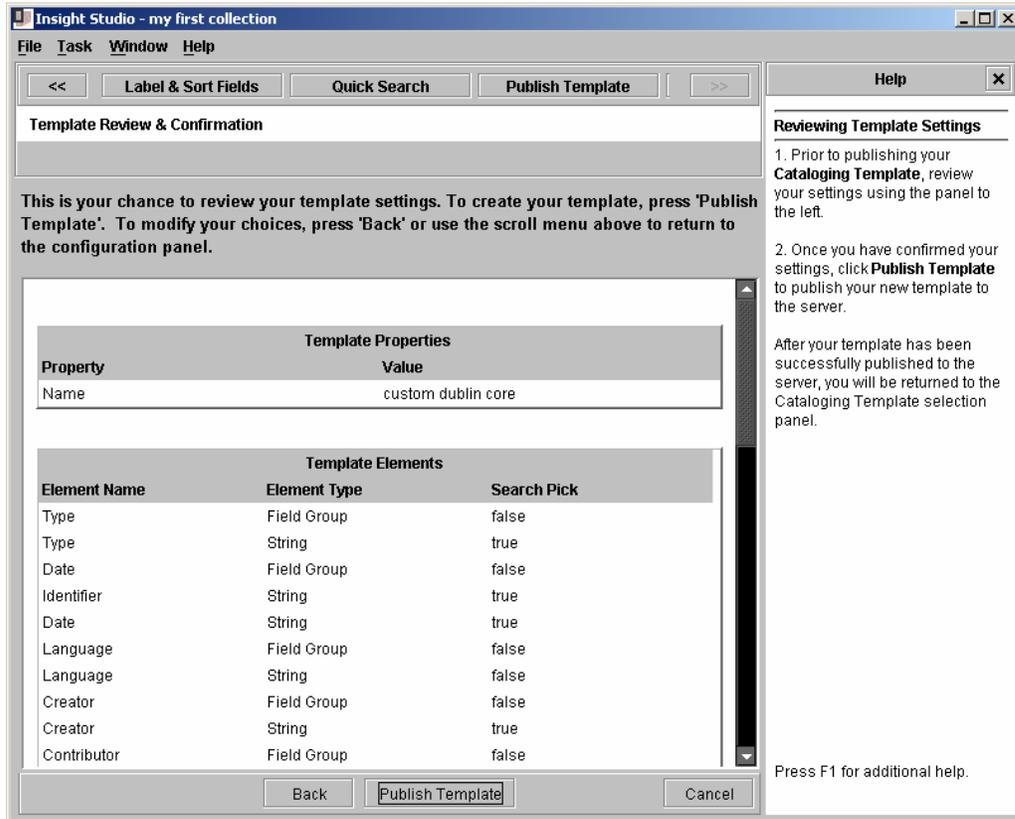
Choosing Quick-Search Fields

Quick-Search fields are elevated search options displayed to the end user on the top level search menu. Fields commonly searched are featured for rapid reference, saving the user the effort of hunting for the field in lengthy field lists.



Reviewing your Template's Properties

Once you have specified all of your Template's fields and properties, Insight Studio provides you with the opportunity to review your settings one last time before you publish your Template.



Publishing your Template

When you have verified that your Cataloging Template is correct, click Publish Template. The Template will now be added to the list of Cataloging Templates available when creating a new Collection.

Modifying an Existing Cataloging Template

If you would like to modify an existing Cataloging Template, there are two options.

If you have not started using the Template:

Create a new Template based on the existing Template.

If you have content in your Collection:

Once you have added content to a Cataloging Template, there are potential issues to consider before modifying it.

- 1) If you have multiple Collections using that Template, then you will be modifying the Template for all Collections.

- 2) Certain modifications, such as deleting fields or moving them between field groups can lead to data loss.

The following actions can be performed in the Insight Administrator Tools:

- Adding a field from a Cataloging Template (see page 141).
- Removing a field from a Cataloging Template (see page 147).
- Moving a field between Field Groups (see page 147).
- Tuning the display of your Data in the Insight Data Window (see page 148).
- Modifying Cataloging Templates (changing field and field group properties) (see page 139).



WARNING: When making changes to Cataloging Templates, it's best to ensure that other users are not importing data using Insight Studio, or cataloging data in Inscribe.

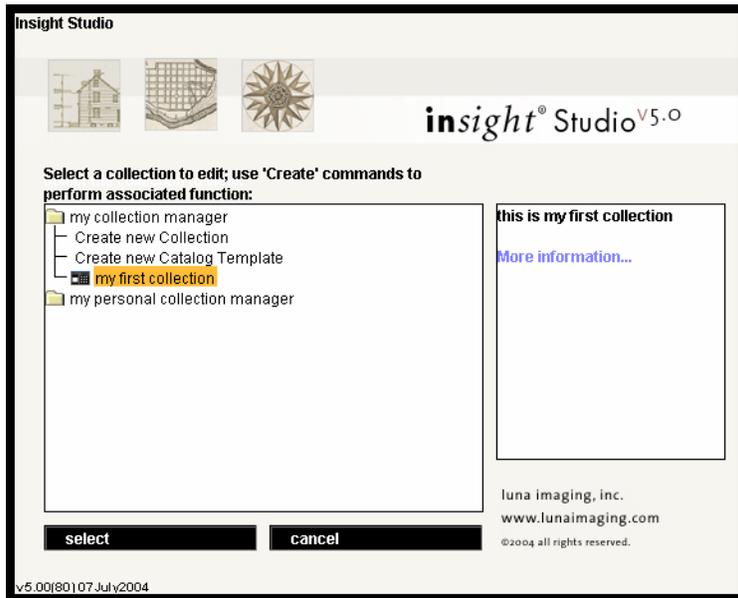
Managing your Collection

Managing your Collection consists of the following tasks:

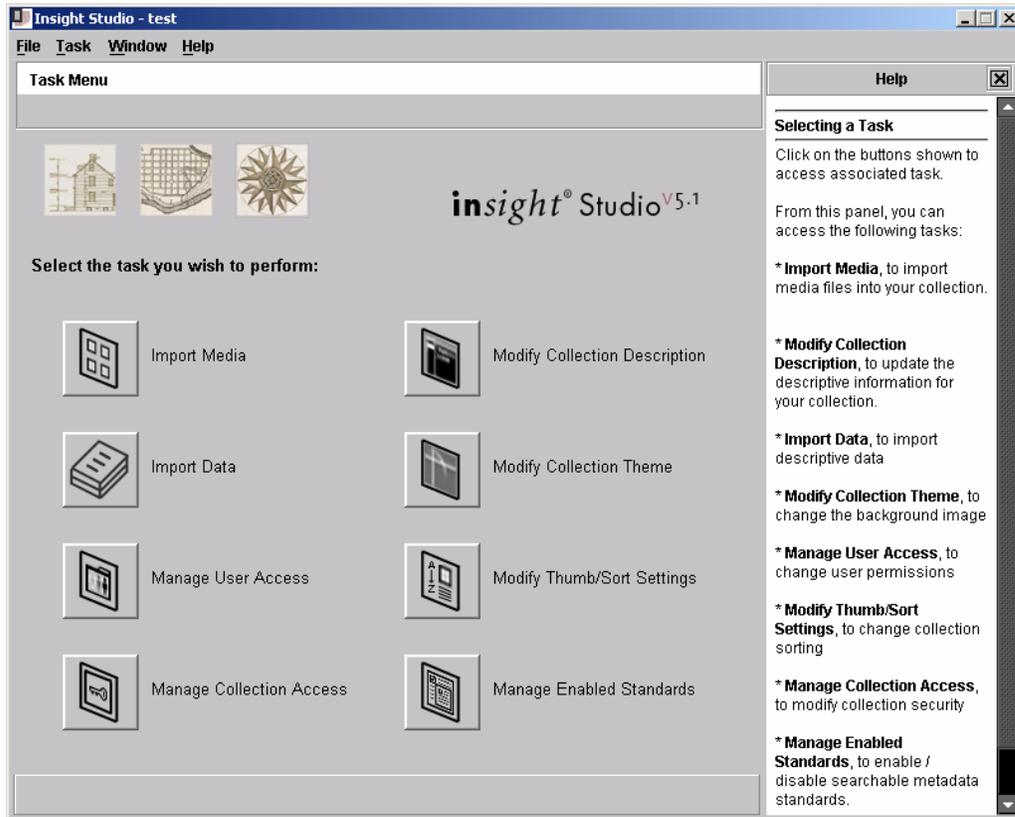
- Import Media
- Import Data
- Manage User Access
- Manage Collection Access
- Modify Collection Settings
- Modify Collection Theme
- Modify Thumbnail / Sort Settings

Choosing a Collection to Manage in Insight Studio

When you log into Insight Studio, you have the option to **create a new Collection / create a new Cataloging Template**, or to choose from a list of existing Collections to manage.



To manage a specific Collection, highlight it in the Collection list and press select. Once you have chosen a Collection to manage, Insight Studio will present you with a list of tasks to perform.



Importing Data

The Insight Studio Data Import Module enables users to import batches of content from simple delimited sources such as TAB or COMMA separated files. These delimited files can commonly be created by applications like FileMaker Pro, Excel, or Word.

When to Import Data

When importing data using Insight Studio, the importer **MUST** be the only tool updating the Collection. If Insight Studio is importing data, it will preclude all other catalogers from making changes as it imports. It is therefore suggested that you perform data import in off-hours to ensure optimal productivity.

Using the Data Import Module with Collections created in versions before Insight 5.1

Pre-5.x collections maintain a slightly different structure than 5.x collections. For a collection created prior to 5.x to use the Data Import Module, it must comply with the 5.x

Cataloging Template structure. Specifically, Cataloging Templates add the following rules to a fields, field groups, and records.

- 1) All field names must be unique
- 2) All Record Types must have a corresponding Field Group (even if empty)

NOTE: If you are using the Luna VRA v1, distributed with Insight Standard 3.5 – 4.1 and ran the VRA upgrade script distributed with Insight 5.0 then your collection complies with these requirements.

Using the Data Import Module with the Indexer

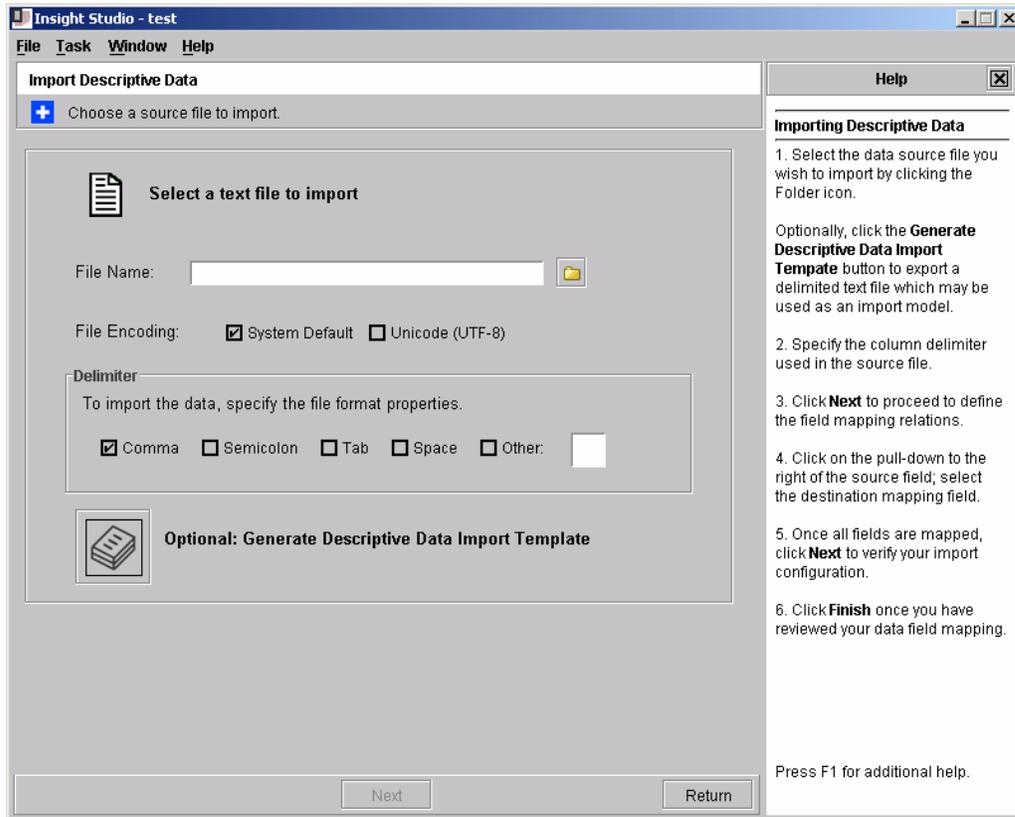
Many pre-5.x collections were built using external source tables. These tables were/are indexed to draw content into Insight. As content changes in the external database, Insight must be re-indexed to recognize those changes. In most cases, the Insight indexer only operates in one direction, that is importing content into Insight, but reflecting changes made via Inscribe or the data import module back into the source data. Although the data import module may be available for collections that utilize the indexer, it is strongly suggested that you choose only one mode for data import, either the data import module or the indexer.



WARNING: Content imported via the data import module will not be available after re-indexing unless source-table write-back is enabled for your collection.

Creating an Import File

Insight Studio, like all data import tools, maintains specific rules on the structure and content of an import file prior to its import. Without these rules, it would be impossible to maintain the structure of the data as well as ensure the integrity of the overall file.



General Rules on File Import

- The file must be delimited using a comma, space, tab, or other single character delimiter.
- The first row of the data file must contain column names.
- Fields from the Object Record must be in the leftmost columns.
- At least one field from the object record must have a value in each row.
- At least one field within each Record Type (Field Group) must have a value.
- Fields must be connected directly or indirectly to the object record.
- Each column name must be unique. Multiple columns may map to the same field.
- Field values containing the chosen delimiter must be quoted

Generating a Data Import Template

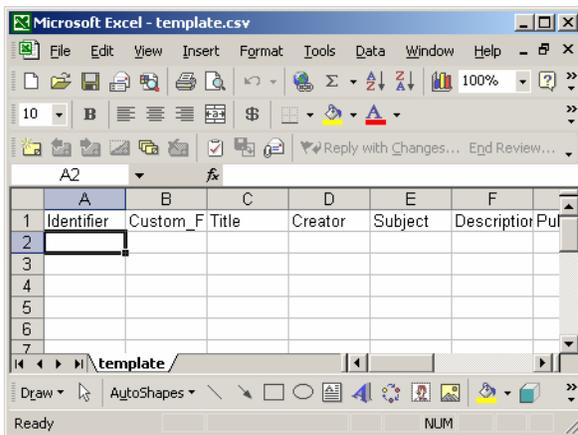
Insight Studio can create a data import template for your collection. This template can be populated within Excel, FileMaker, or other applications.

To create a Data Import Template for your collection:

- 1) Within Insight Studio, open the Data Import section.
- 2) At the bottom is a button "**Generate Descriptive Data Import Template.**" This will export a delimited file to the location that you specify.

Using the Data Import Template within Microsoft Excel

Once you open the template within Excel, the first row should contain field names for collection.



If you don't have existing data

If you don't have existing data, then you can simply start filling in the template. Please review the rules for file import below.

If you have existing data

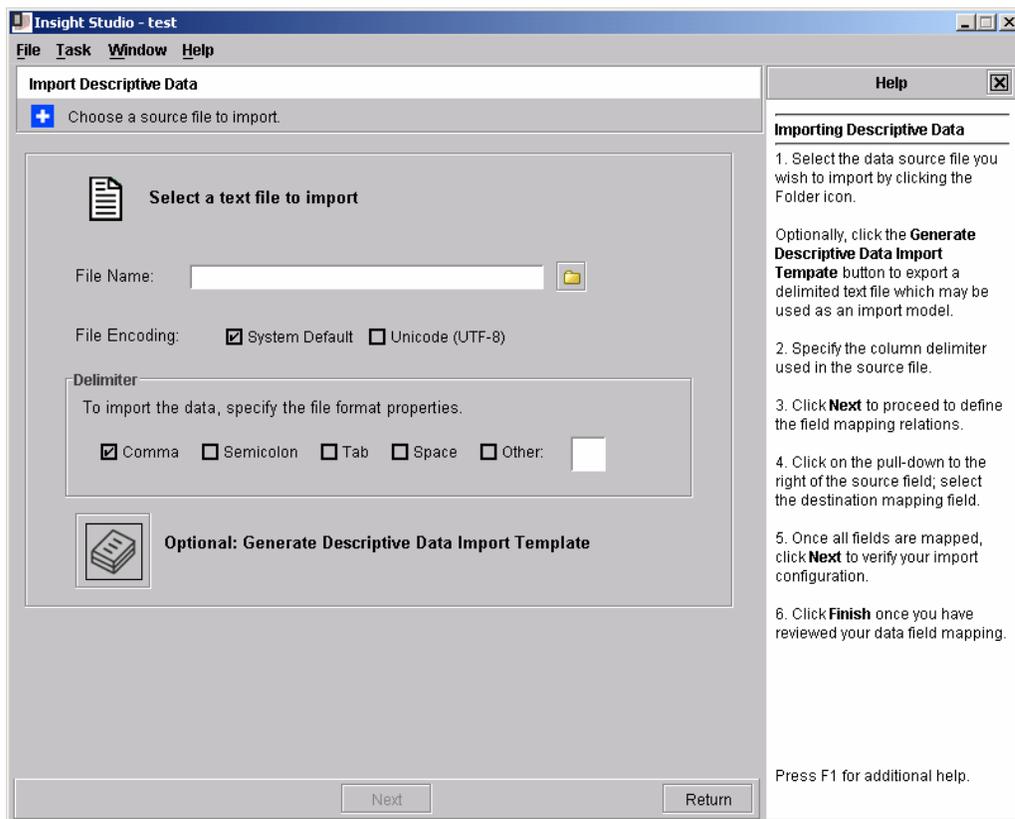
If you have existing data, copy and paste the columns from your existing data into the template. If you have groups of fields that repeat, you can repeat the entire record group within the data field (simply change the column names).

NOTE: To determine the contents of an Insight Record Group, either look at the Record Forms available in Inscribe or view the Cataloging Template in Insight Studio.

Specifying an import file

Select the file you would like to import.

NOTE: It is good practice to maintain a copy of these import files for backup. They may be useful if you ever need to confirm what was imported or need a record of what happened and when it happened.



Specifying the Field Delimiter

The field delimiter is the ASCII character used to mark when one field ends and the next one begins. The four most commonly used delimiter characters (Comma, Semicolon, Tab, and Space) are provided as options, but "Other" allows for entry of a custom character to be used as a delimiter.

Handling Paragraphs or New-Line Characters in your Data

New-line characters, in the form of paragraphs or carriage-returns will cause issues in data import, preventing Insight from importing complete data records. If the data being imported into Insight has new-line characters, it must be pre-processed to ensure the new-lines or paragraphs are properly imported.

To pre-process your new lines for Insight:

- 1) Open a text editor which allows you to replace new-line characters such as vi, UltraEdit, or TextPad.
- 2) Find all new-line characters and replace them with ~CR~LF~.
- 3) Save the file.

NOTE: If you want to be more specific when replacing new-line characters, replace “Carriage Returns” with ~CR~ and “Line Feeds” with ~LF~.

Handling Unicode Characters or Non-Western European Characters in your Data

Insight has full support for Unicode or non-western characters as long as your database is properly configured to support this content. If you are importing Unicode (**UTF-8**) files, choose the UTF-8 setting when specifying a file to import.

To verify that your database is properly configured to support Unicode values, please review the database configuration section of the **Insight 5.1** or later **Installation & Configuration Guide**.

NOTE: The file import tool will default to the local character set, if you are importing data with special characters (i.e. accents or other diacritics) then make sure your data is saved in “Windows” or “Macintosh” format, depending on platform.

Mapping Columns or Fields in Your Data to Fields in Collection

The import file must be mapped to your Cataloging Template. If the column names in your import file match field names in your data, then the importer will automatically match those for you. For every column in the import file that cannot be matched it will place “MISSING MAPPING” in the Target Insight Field column.

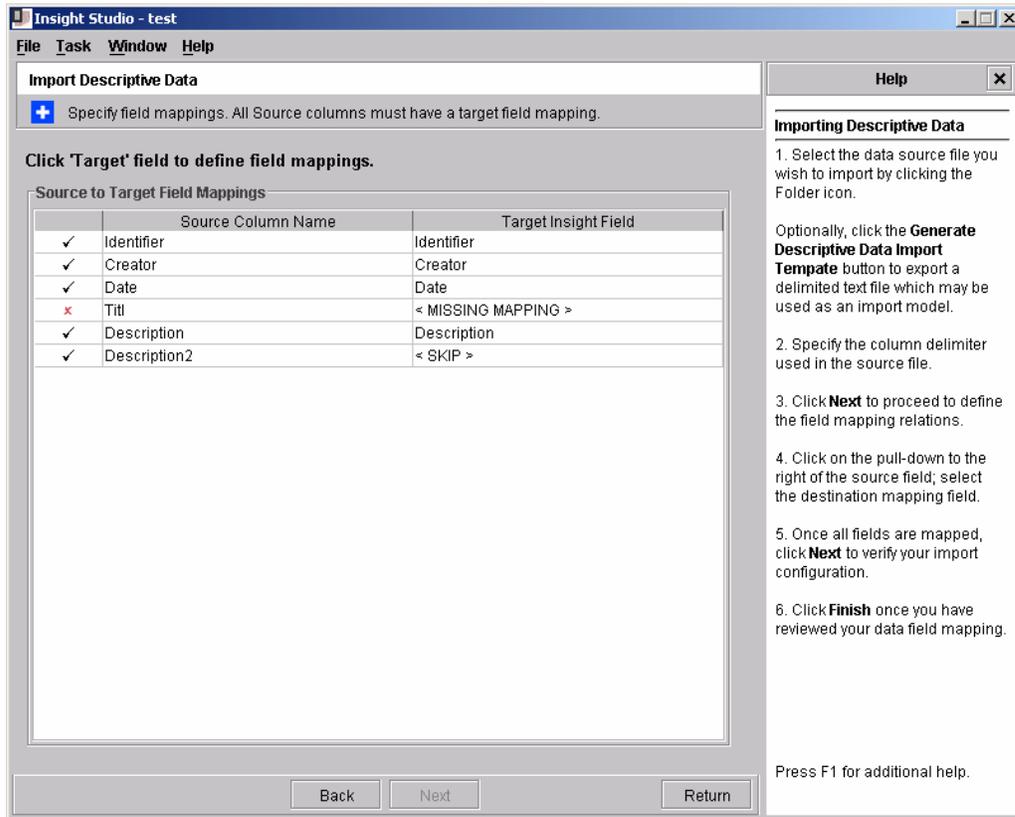
To map an unmapped field, or remap an existing field:

- 1) Locate the field name in the “Source Column Name”
- 2) Click on the field name in the Target Insight Field column to open the mapping field pull-down.
- 3) Select the correct field you want to map the data into.

NOTE: To **automatically map repeating fields** within your data file to the same field within Insight, simply append an incrementing number to the end of the fieldname.

For example, if the field name within Insight is “Subject” and there were four Subject columns; simply name the columns “Subject1”, “Subject2”, “Subject3”, and “Subject4” respectively.

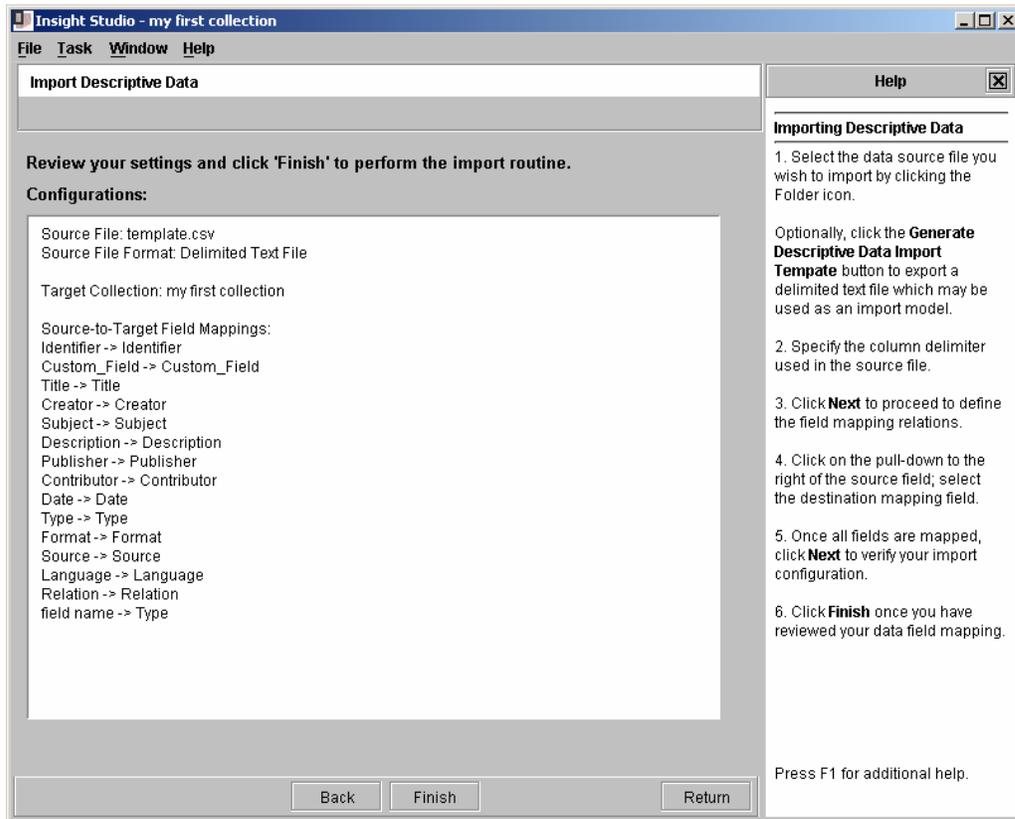
NOTE: To **ignore a field** within your data file choose “<SKIP>” from the pull-down.



NOTE: You can map multiple columns to the same field within Insight. When you have completed mapping your fields, select Next.

Performing the Import

To begin your import, select "Finish."



The data import process occurs in a series of phases. First, the importer will attempt to parse and validate each of the records. This will ensure a valid structure as well as attempt to prevent the tool from importing records that are missing fields. Second, it will package and send the data to the server. Finally, the server will process each of the records and import the data.

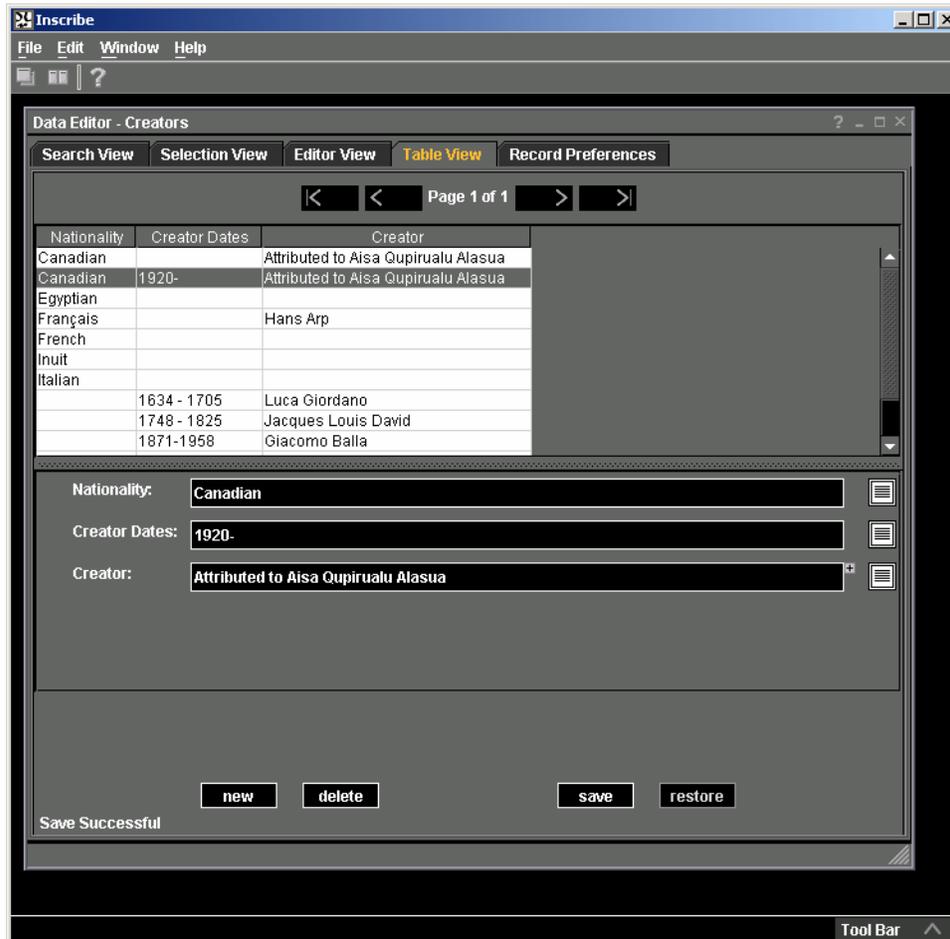
NOTE: Data import can be a complex operation, especially when there are a lot of records involved. Please be patient while the import process is occurring, as it may take some time. A data file with 1,000 records may take an hour or more.

Data Duplication

The data import module will attempt to resolve duplication within source data. For example, if multiple source records reference identical Creator information, only one instance of that Creator will be imported. The data import module does not detect source data which duplicates content already in Insight – meaning that importing a Creator which already exists within Insight will create a duplicate entry. The next section describes a tool for finding and eliminating these duplicates.

Merging Duplicate Records

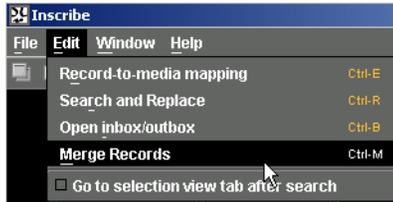
Duplicate records are a common issue within any database system. To address this issue, Inscribe includes a Record Merge Tool which enables users to combine duplicate values in controlled vocabularies and authorities (independent records).



The Merge tool works by finding duplicate field values within a given record type. The tool then returns each set of duplicate values and allows the user to “re-map” the duplicate records to the “primary” record.

To load the record merge tool:

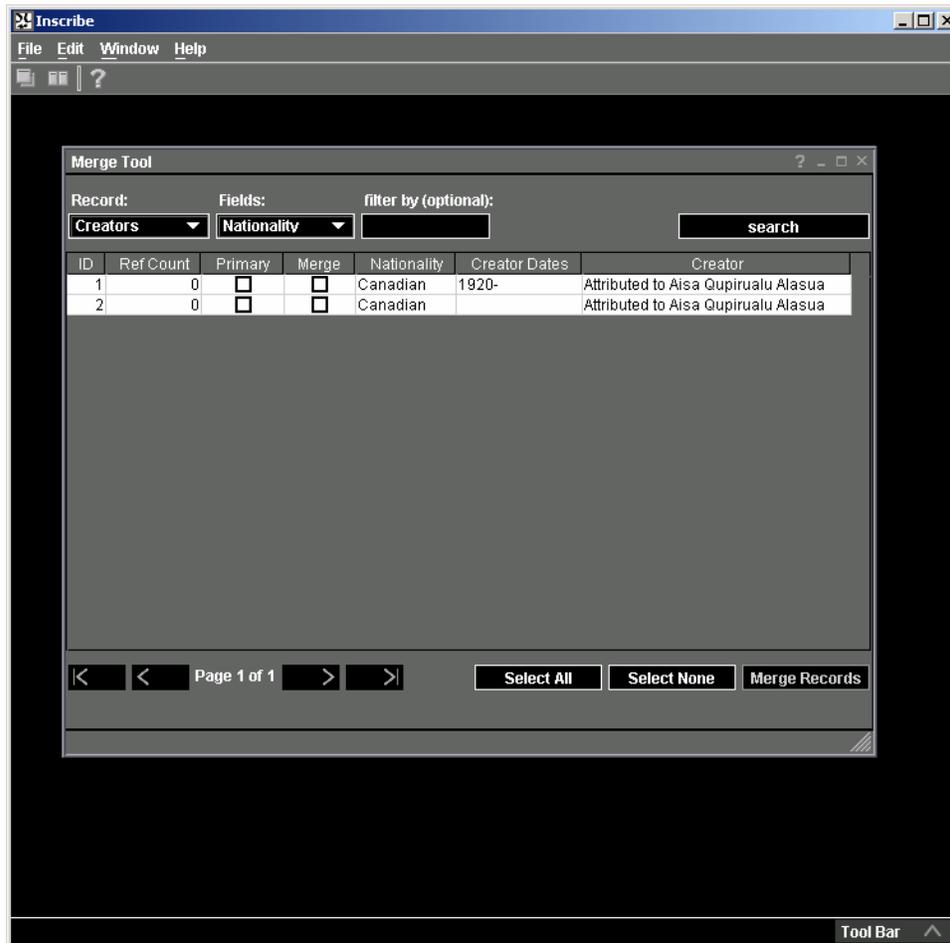
- 1) Launch Inscribe
- 2) Login to the collection you wish to work with
- 3) Go to the Edit Menu and select “Merge Records” (note: this menu item will be disabled if you do not have permission to fully commit data updates, or if there are no controlled vocabularies or authorities in the collection.)



- 4) In the Merge Window, select the "Record Type" you wish to work with.
- 5) Select the Field within the record that will be used to identify duplicate values.
- 6) Click on the "Search" button.
- 7) Each page returned will represent a set of records with duplicate values within that field.

NOTE: To filter the result sets (pages) by a specific value or set of values, you can enter that value in the "**Filter By**" area before you click search.

NOTE: The Merge Tool only finds exact matches on field values. If there are similar but not exact matches on values, use the "**Find and Replace**" tool to make values match exactly.



- 8) Once a set of duplicate records has been found, identify the “**Primary**” record. The “**Primary**” is the record that will be kept once the merge is complete. Select the “**Primary**” checkbox for that record.
- 9) Once you have identified the primary record, click the “Merge” checkbox for all of the rows that should be “merged” with the primary record.

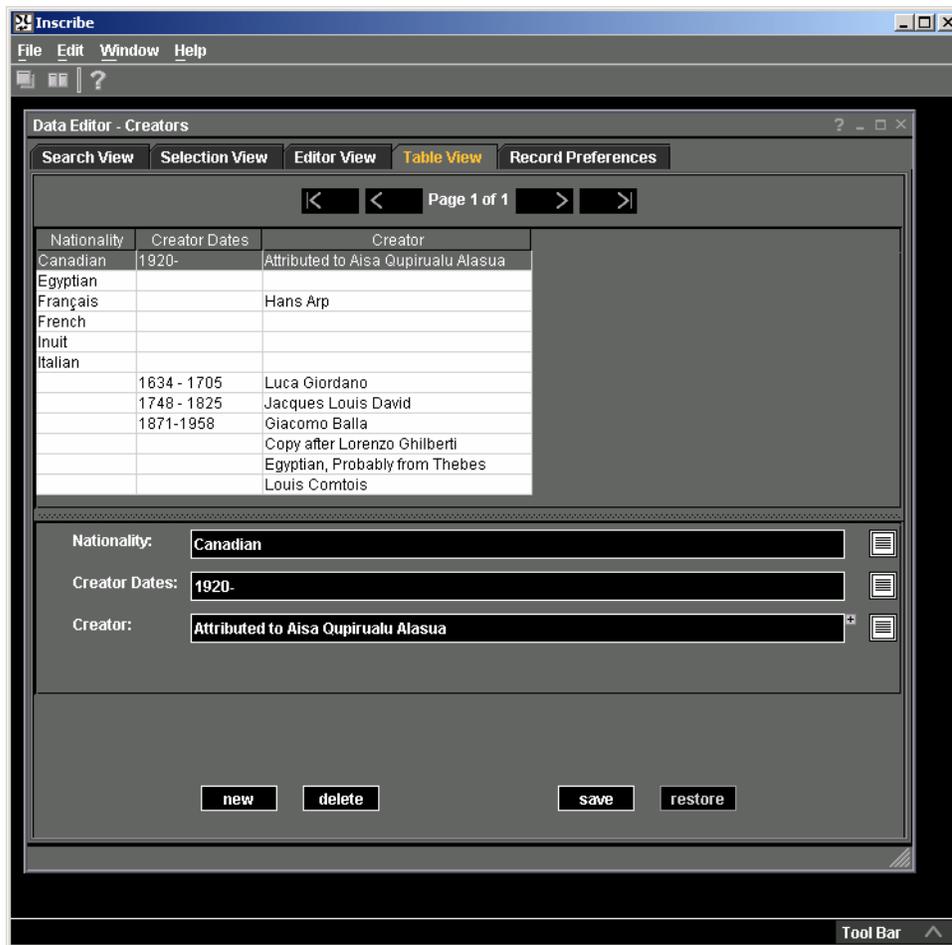
NOTE: If you are working with a **Controlled Vocabulary** or **Authority File**, a count of the records that use / link to that term or record will appear in the “**Ref Count**” column. After the merge, all of the records that use / link to a row that was deleted will be **re-linked** to the entry marked as “**Primary**”.

- 10) Once you have identified all of the records to merge on that page, as well as the primary, click the “**Merge Records**” button. This will only affect the current page of results.



- 11) Repeat for each of the pages of duplicate records.
- 12) Once you have finished merging records, open that record type and search for one of the values you merged; you should now only see one entry.

NOTE: you can see the results of your merge the most clearly in the "Table View"



Media Processing

Media processing is how images and multimedia are imported into Insight and linked with object (data) records. Media processing is broken down into four separate stages:

Media Import & Upload: Creates derivative JPEGs and the Wavelet Encoded File from the original source media, and uploads them to the Media Manager.

Media Linking: Associates media files with data records (objects).

Review: Allows you to view the newly assigned links between data before publishing them.

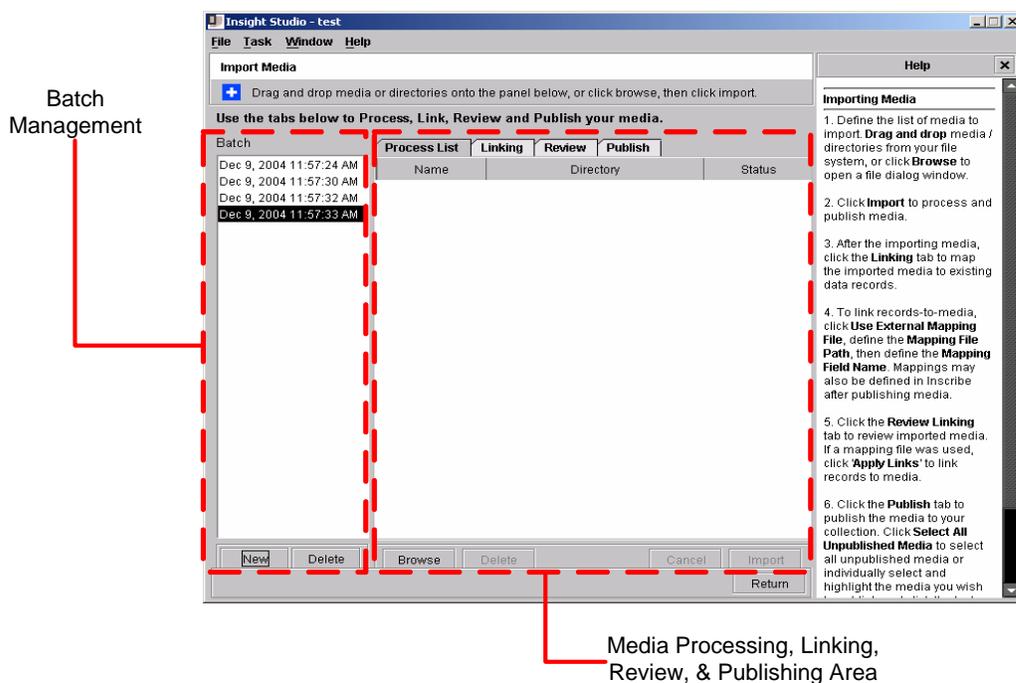
Publishing: Publishes new media to a Collection.

NOTE: While processing media, you can link media to your data records, but only if the data has already been imported.

Introduction to Batches

Insight uses a concept of “**Batches**” to help administrators manage imported content. By default each batch represents one processing session in Insight Studio. Using batches provide the added benefit that administrators can review and modify older batches at any time. Common tasks may include re-linking or deleting items.

Batches are displayed on the **left-hand-side** of the media processing tool. Administrators can view, select, delete, and create batches from this panel.



Creating a New Batch

Typically batches are created at the beginning of an import session.

To create a batch:

- 1) Open insight Studio.
- 2) Login to the collection to which you wish to add content.
- 3) Select “**Import Media**” from the **Main Menu**.
- 4) Click the “New” button in the Batch section of the Media Processing Tool

NOTE: When you first open the Media Processing Tool, if you simply drag content onto the processing window, a new batch will be automatically created.

Selecting an existing Batch

An administrator can jump between batches at any time. This enables the administrator to compare or simply review all of the contents.

To select a different batch:

- 1) Locate the batch to view in the batch section of the media processing tool.
- 2) Click on the batch name.
- 3) The processing list, Linking, Review, and Publishing panels will now be updated to reflect the contents of the newly selected batch.

Renaming an existing a Batch

Renaming batches is not currently possible within Insight Studio. However, it can be accomplished within the Insight Administrative Tools. For more Information on renaming batches, please see "Reviewing and Modifying Mapped Media" on page 129.

Deleting a Batch

Deleting a batch allows an administrator to remove the batch from insight.



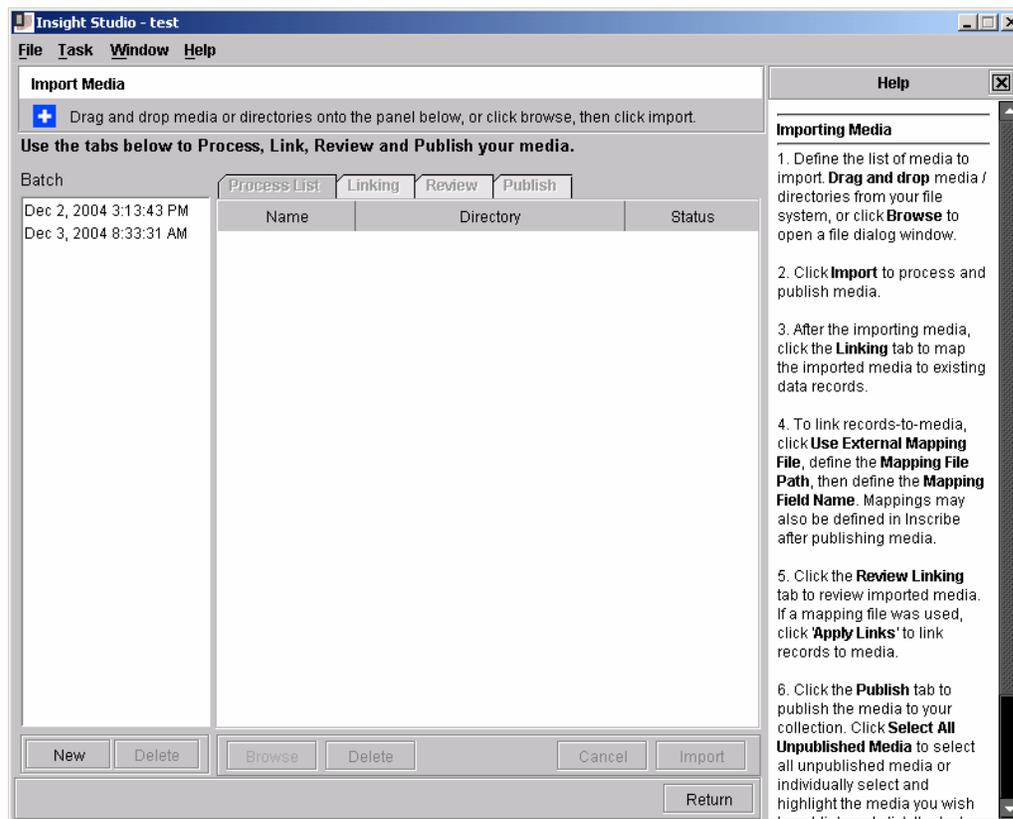
WARNING: Deleting a batch will delete the images/Media from Insight. You will not be able to recover these Images/Media

To Delete a Batch:

- 1) Locate the batch to delete in the batch section of the media processing tool.
- 2) Click on the batch name.
- 3) Click the "**Delete**" button at the bottom of the **Batch area**.

Selecting Media for Import

Insight supports a wide range of media formats, see Table 13: Image and Multimedia formats supported by Insight on page 238 for a full list of supported media formats.



The Media Selection panel allows you to either drag-and-drop media files or entire folders onto the panel, or to select browse and specify files or folders to import.

NOTE: When processing multimedia files (audio, video, QTVR, etc.), Insight Studio generates default icons for thumbnail derivative images (per media type). If you want custom thumbnail images for your multimedia, use Insight Administrator Tools instead.

NOTE: If a batch is not selected within Insight Studio when a user drags images onto the window, a new batch will be created.

Managing Large Media Files

If you are importing large media files, larger than 40-50MB, you may have to adjust your application's memory settings to support these large files. If you encounter an out-of-memory error, please see Tuning Image Processing Application Memory for Insight Studio and Administrator Tools on page 228 for more information.

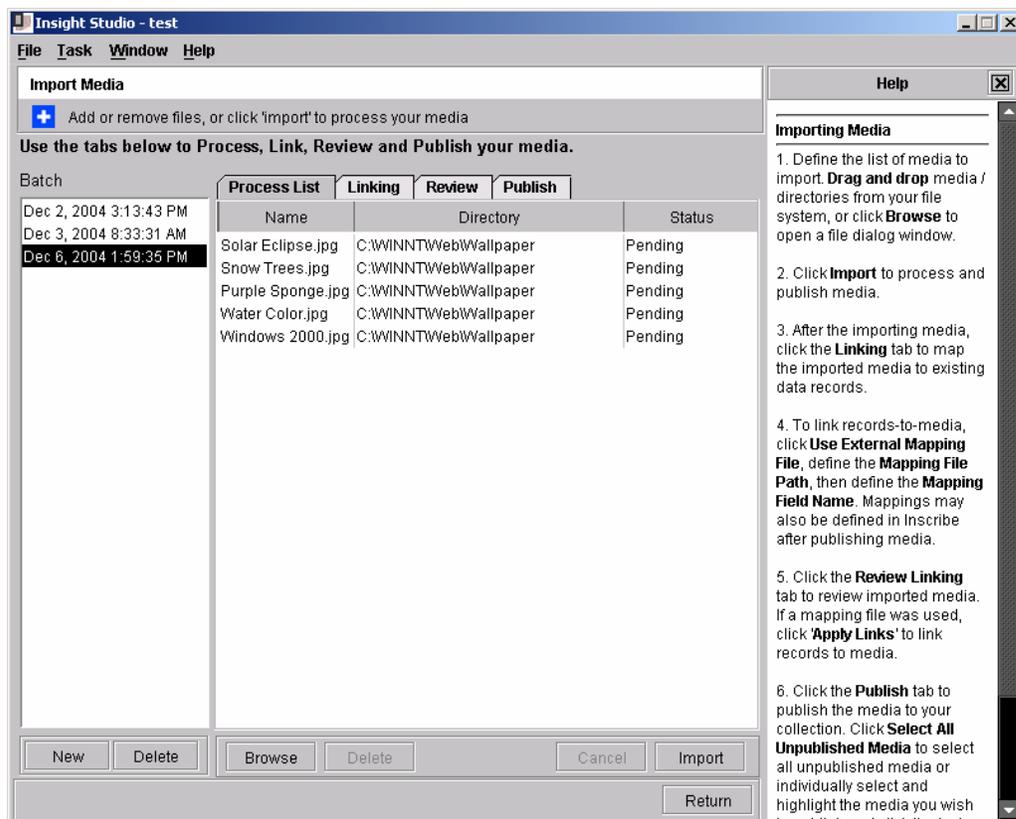
Adjusting the JPEG2000 Compression Settings

If you would like to adjust the JPEG2000 compression settings, for example, to change the encoder to use "lossless compression", please see "Changing the JPEG2000 Compression

Settings for the Insight Administrator Tools or Insight Studio" on page 230 for more information.

Importing & Uploading Media

Insight Studio is designed to import, organize, and upload content to the Insight Media Manager. Once content is selected, click the import button to begin importing media. Insight Studio will create derivatives and upload them to the server.



As Insight Studio creates the derivatives and uploads the media, it will update the status bar as well as the status column for each image.

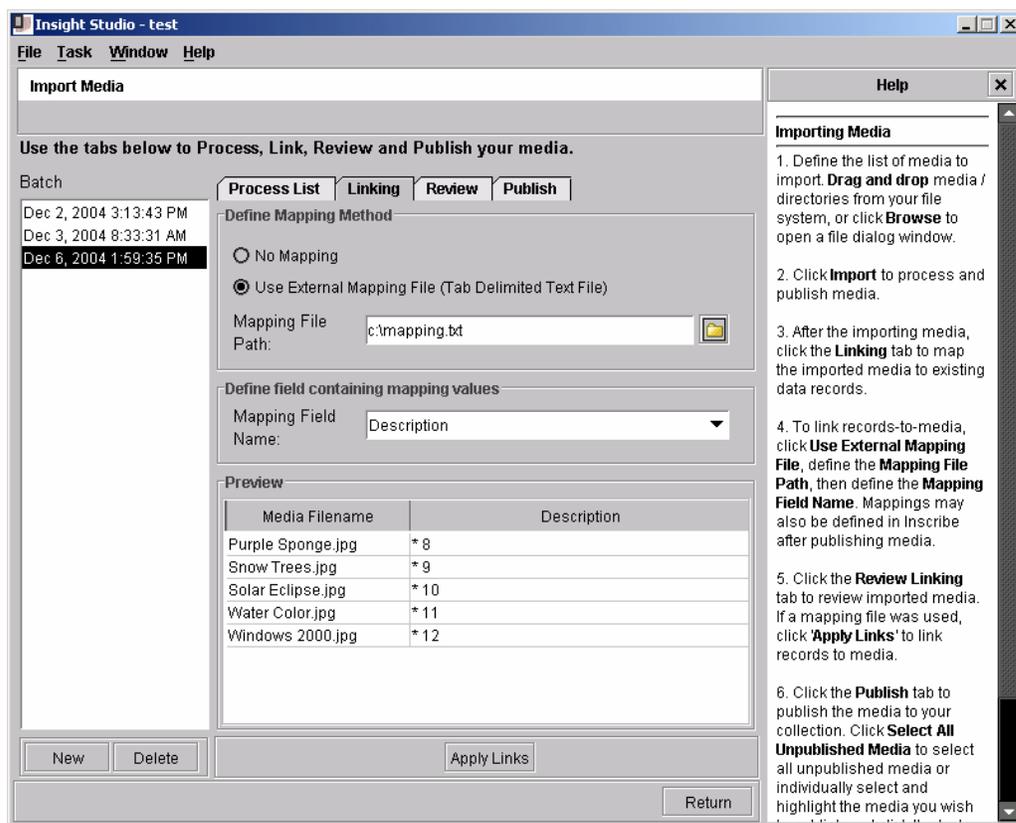
NOTE: If you have not licensed the JPEG2000 Encoder for your workstation, only the JPEG derivatives will be created (sizes 0-4). For more information on Insight's Sizes, please see Table 14: Image Sizes In Insight on page 239.

NOTE: If you would like to use a custom image processing profile to create MrSID derivatives or to create wavelets at different Insight sizes, please use the Insight Administrator Tools. (for more information on this please see Media Processing on page 117).

Once Insight Studio has completed importing and uploading media, you can review the processed media in the Review Tab. If you are not planning to link the media to currently imported data records, it is suggested that you publish the media files.

Mapping Objects to Media

Once media is processed, it can be bulk-linked to data records by using a mapping file. Mapping files are TAB separated files containing two columns: the first for the image filename and the other for a unique value in the data record. Insight uses the mapping file to associate object and image values.



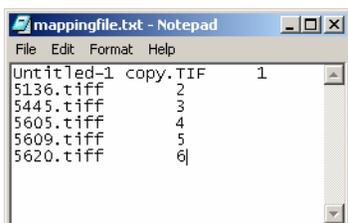
Using a mapping file is the quickest method for creating associations between objects and images in Insight. To create a mapping file, simply open Excel or another application, and enter data in two columns. The first column should be the filename of the image you would like to map. The second column should be a unique field value in the data that identifies the record to which the image maps.

NOTE: All field mappings must be to the same field. File names are case-sensitive.

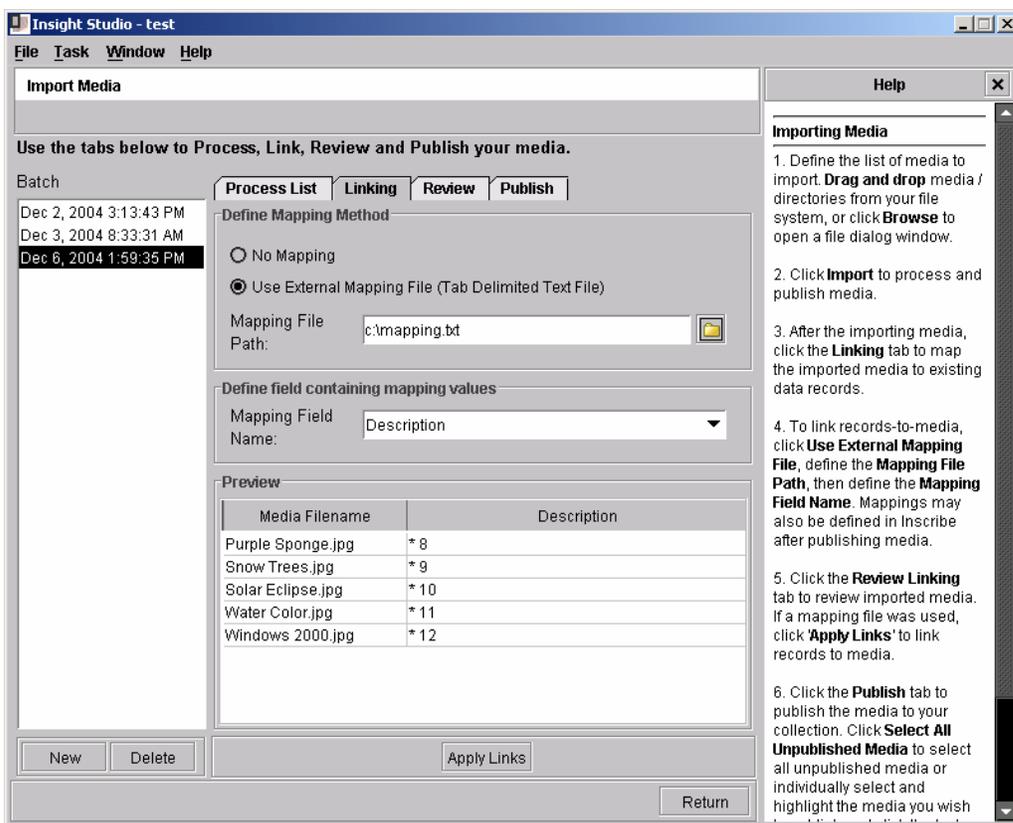
NOTE: The * represents **changed** or **new** values.

NOTE: You can map more than one image to the same record by duplicating the field entry for both. You can map more than one record to the same image by duplicating the image name next to each record entry.

Figure 7: A Sample Mapping File



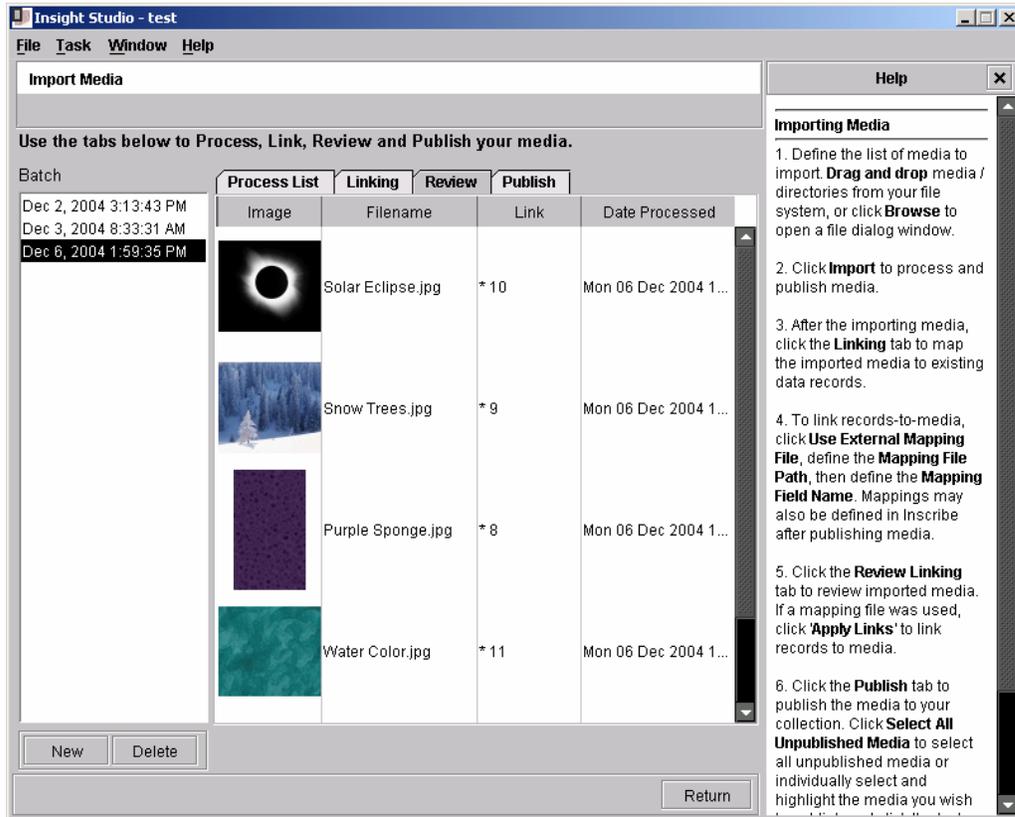
Once your mapping file has been loaded, you will see a preview of your mappings in the window at the bottom. Review the list to ensure that the file has been loaded properly.



Reviewing your Mappings

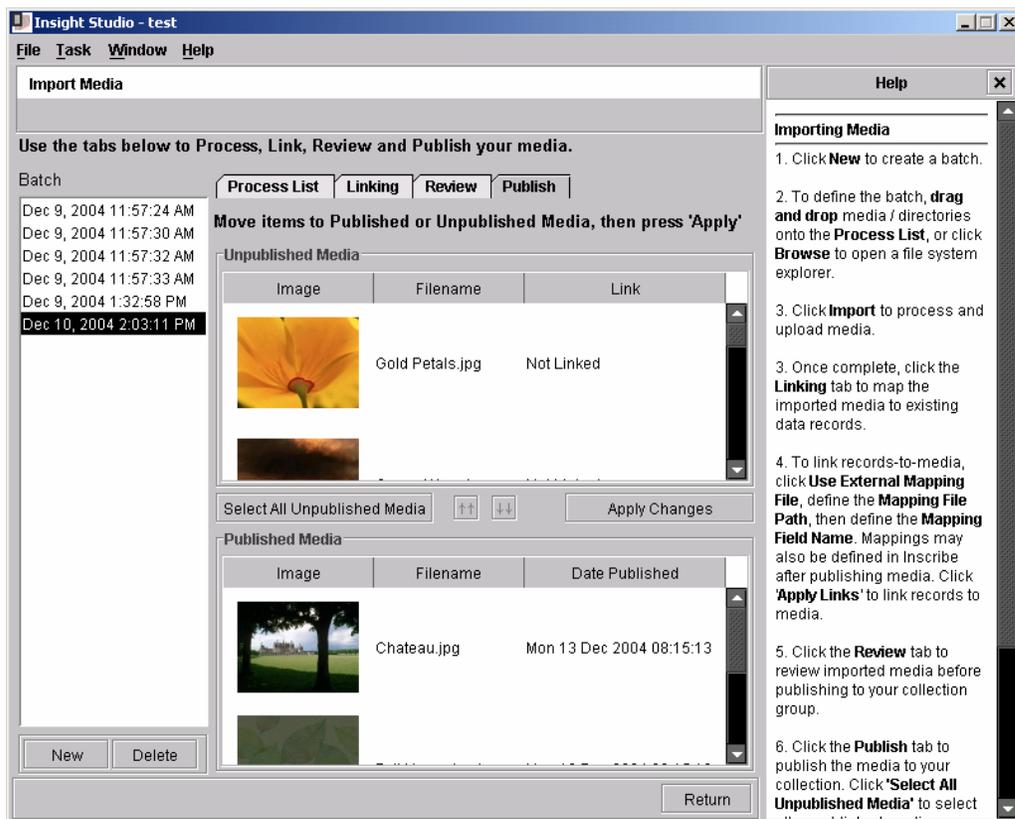
To apply your record-to-media mappings to the media you just processed, press apply in the review panel. The review panel will now be updated to display your mappings next to

your processed media. Review the thumbnails for your processed media to ensure that they appear properly, and check your record-to-media mappings one last time. When you are sure everything is right, continue to the Publish tab.



Publishing Changes

After reviewing your processed media, you must publish it into your Collection. Currently, your media is not associated with a Collection, but instead with the Collection Manager. Publishing enables content to be seen within Insight.



To publish your processed media:

- 1) Select specific media to publish in the left-hand window and press Select All Unpublished Media.
- 2) Press ↓↓ to add the media to your Collection.
- 3) Press Apply Changes to publish your media files.

Updating Links between Object and Media Records after publishing

Once images have been published to Insight their links can be updated by returning to the batch and applying a new mapping file in the linking section. If you do not have a mapping file, you can also modify specific records using the **record-to-media-mapping** tool in either **Inscribe** or the **Insight Administrator Tools**.

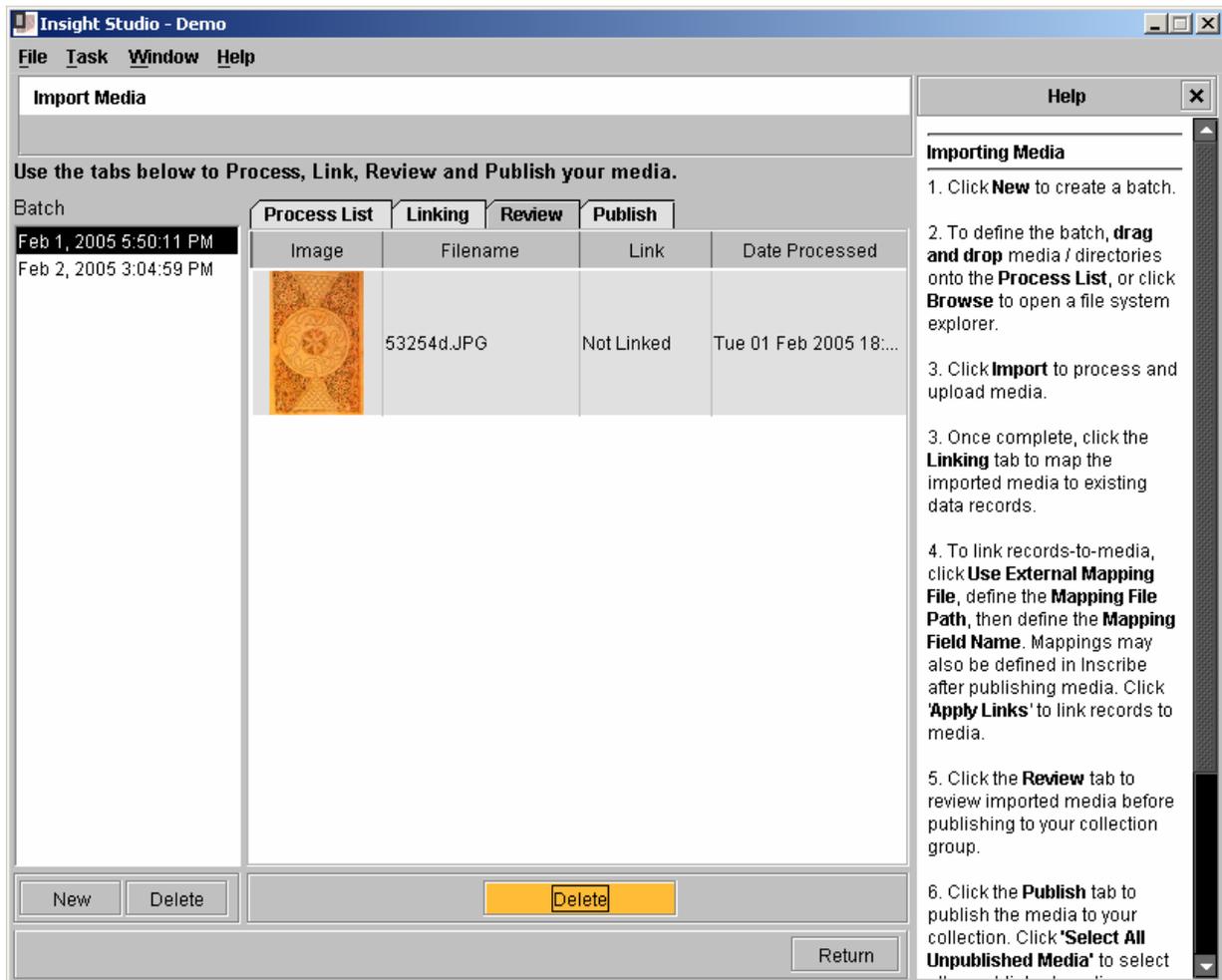
Modifying a Batch

Once the media has been published it is still possible to modify a batch's contents including adding new content, linking or re-linking existing content; simply return to the Media Processing Tool and select the batch you wish to modify.

Deleting Media

To delete a piece of Media, Select the image in the Media form the Review panel or the Process List and press the delete button. You will be prompted for conformation then the Media will be removed from the system.

Note: Media Stored on the server will not be deleted in this process, only references within the insight collection manager database will be deleted. You will not be able to use these images again in insight.



Deleting Media in Inscribe

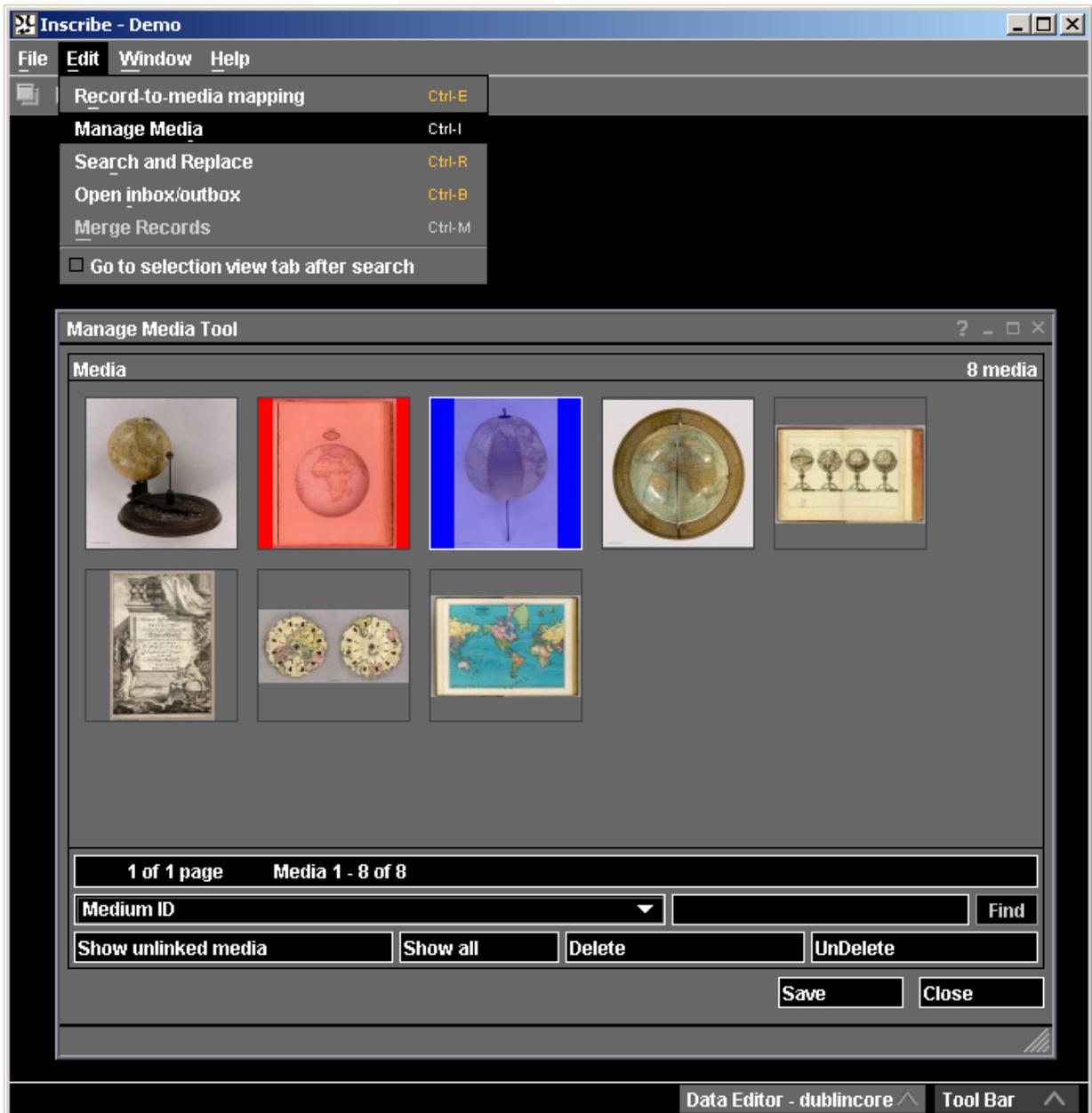
Inscribe has a new tool that allows you to delete media. You can find this tool under the edit menu called Manage Media.

Manage Media Tool allows you to search for media by filename, MediaID or By keyword if it is linked to data.

To delete an item, select it by clicking on it. The item will turn blue. You can select a series by using the Shift key or various images by using the control key.

Once the images are selected you can click the delete key and the images will be marked in red for deletion. You can unmark the images by using the undelete key.

When you are ready to commit your selection for deletion, press the Save button.



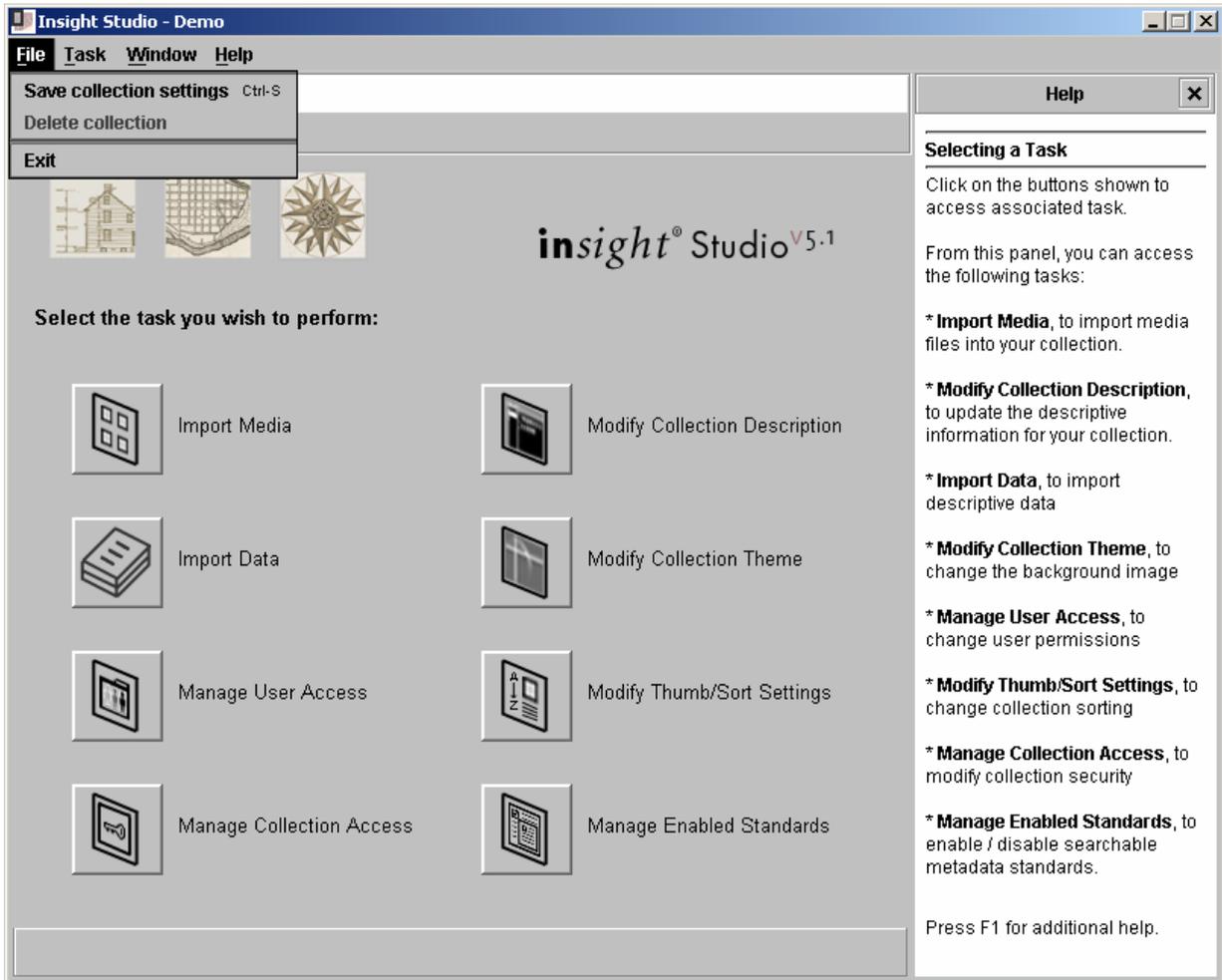
Once a piece of media is deleted, you can not recover it.

Modifying Collection Properties

From time to time, users may want to update basic Collection properties:

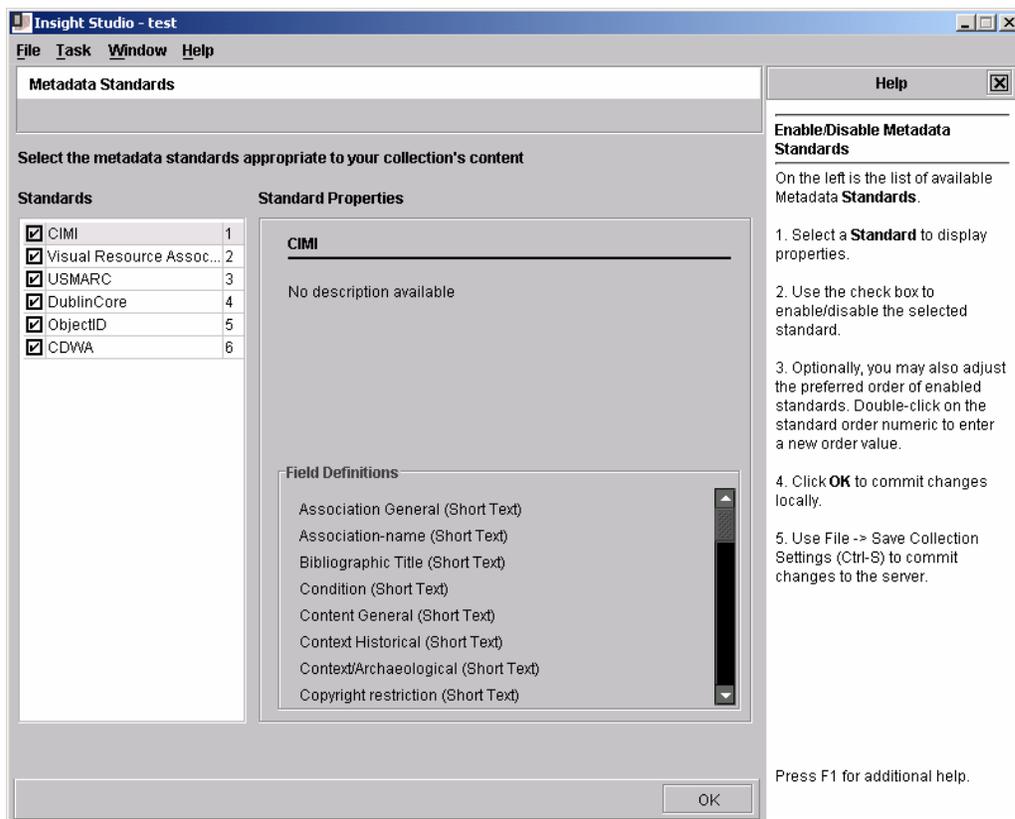
- **Modify Collection Settings**
To change the Brief Description, Website or Copyright Statement.
- **Modify Collection Theme**
To replace the collection theme with another pre-existing theme, or you can create a new theme.
- **Modify Thumb/Sort Settings**

Note: Once these settings have been changed, You will need to "Save Collection Settings".



Managing Standards for your Collection

Collection owners may choose to limit or control the data standards available for a given collection. The “Manage Field Standards” section enables Administrators to affect two specific aspects of the cross-collection searching experience.



Enable / Disable Standards

This allows an administrator to enable / disable a data standard for use with cross-collection searching. It may be useful to disable a standard if only a few fields can properly be mapped between the local data standard and the selected standard, or if you would like to increase the likelihood that a specific standard will be used in cross collection searching.

NOTE: Reducing the enabled field standards down to one cross-collection searching standard that standard will be preferred for all cross-collection searching. If that standard is not available in other collections, users may not be able to cross-collection search between those collections.

To Enable / Disable a Field Standard:

- 1) Login to Insight Studio with your administrative username.
- 2) Select the Collection to which you plan on modifying the standards settings.
- 3) Select Modify Metadata Standards from the main menu, or select Metadata Standards from the Collection Settings section of the task menu.
- 4) Select the Standard you wish to modify.
- 5) **Click** the **checkbox** to the left of the standard to **enable** or **disable** it.

NOTE: Remember to “Save Collection Settings” once you make changes.

Specify Standard Order Preference

When a user performs a cross-collection search in the Java Client, the client resolves the standards between the two or more collections. Any standard that is enabled across all selected collections could be used as the data standard returned to the client. Of the standards that are enabled, the one that has the **highest preference order** in **ALL selected collections** will be chosen.

To specify the preference order of a Field Standard:

- 1) Login to Insight Studio with your administrative username.
- 2) Select the Collection to which you plan on modifying the standards settings.
- 3) Select Modify Metadata Standards from the main menu, or select Metadata Standards from the Collection Settings section of the task menu.
- 4) Select the Standard you wish to modify.
- 5) **Double-Click** on the number to the **right** of the standard name and either **raise** or **lower** the number respectively to **increase** / **decrease** the preference order.

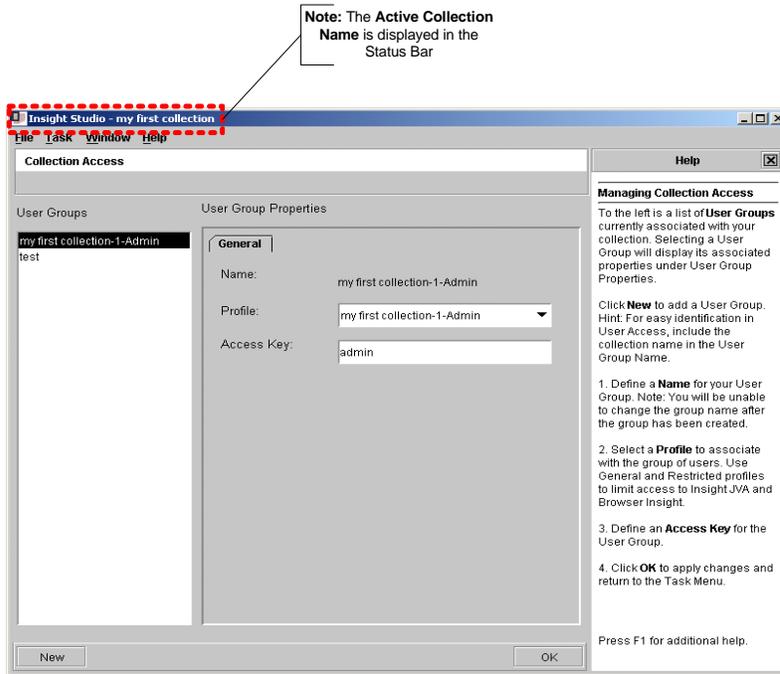
NOTE: Remember to “Save Collection Settings” once you make changes.

Managing Access Permissions

Collection Administrators can manage user access permissions by creating User Groups and assigning specific Profiles to those User Groups. User Groups are then mirrored on the User Manager and associated with specific users.

To Access the Security Settings for your Collection in Insight Studio:

- 1) Login to Insight Studio with your administrative username.
- 2) Select the Collection to which you plan on managing access.
- 3) Either select Manage Collection Access from the main menu, or select Collection Access from the Access Management section of the task menu.

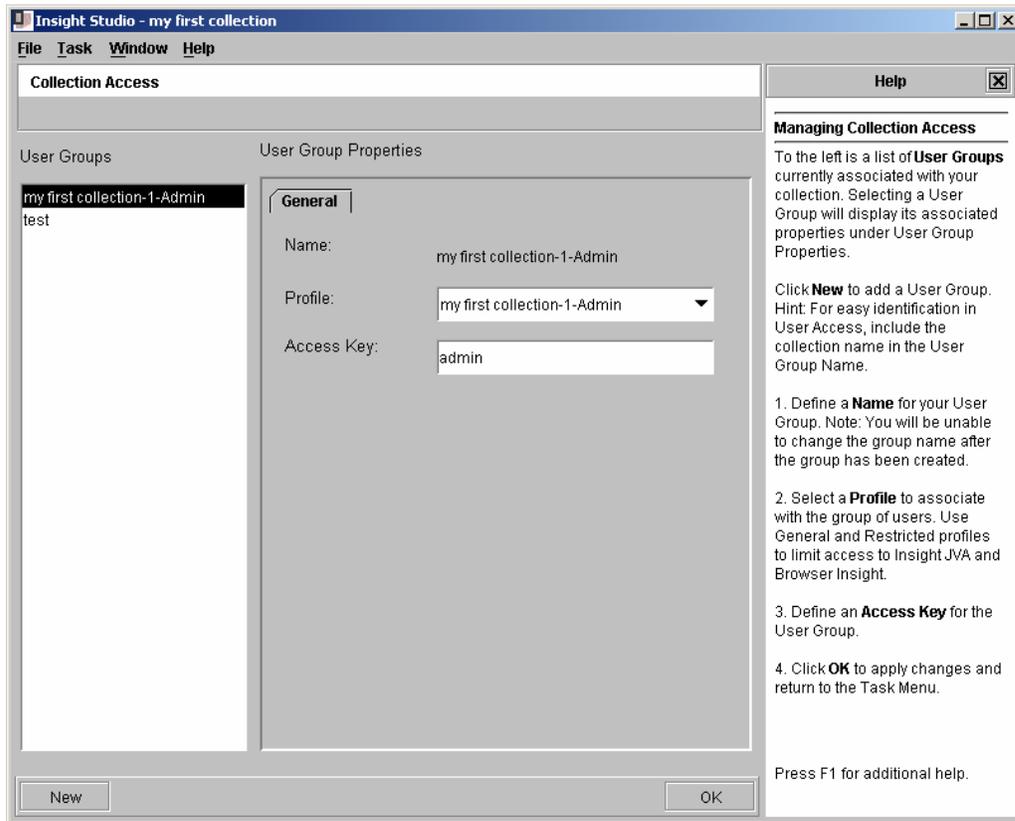


Viewing Existing User Groups

Before you create a new User Group, check the existing user groups to see if any match the permissions you plan on using.

To view the properties of an existing user group:

- 1) Click on a User Group from the menu on the left.



2) The profile, code key, and name will be displayed on the right.

NOTE: For a description of each of the default profiles, please see Table 16: Default Profiles for Collections and Associated Permissions on page 240.

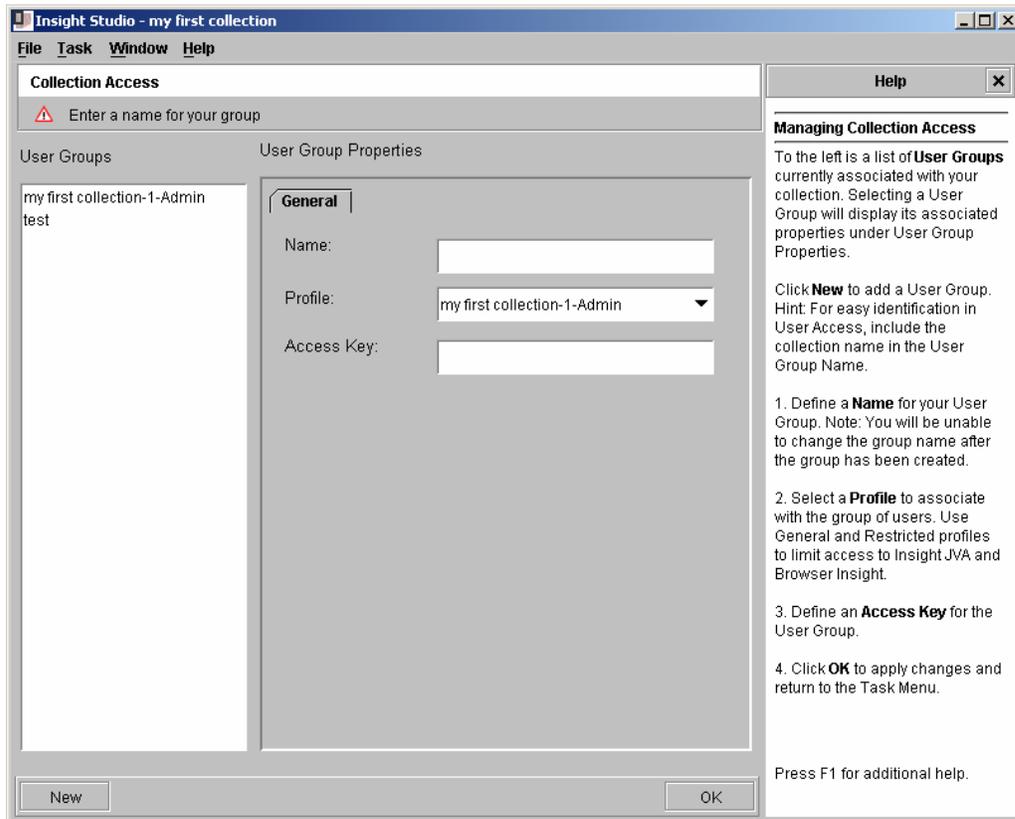
Adding a New User Group

A User Group consists of a name, code key, and a profile.

NOTE: You can use the Administrator Tools to add IP Address restrictions to a User Group.

To add a new User Group:

- 1) Once you are in the Collection Access section of Insight Studio, click the new button at the bottom left.



2) Enter a User Group Name and Code Key

3) Choose a profile from the select list.

NOTE: For a description of each of the default profiles, please see Table 16: Default Profiles for Collections and Associated Permissions and Table 17: Personal Insight Manager Default Profile Privileges on pages 240 and 240.

NOTE: If none of the existing profiles match the security settings you need, you can create a custom profile in the Insight Administrator Tools later. For more information on creating a custom profile, please see Adjusting Profile Settings for a User in a Collection on page 176.

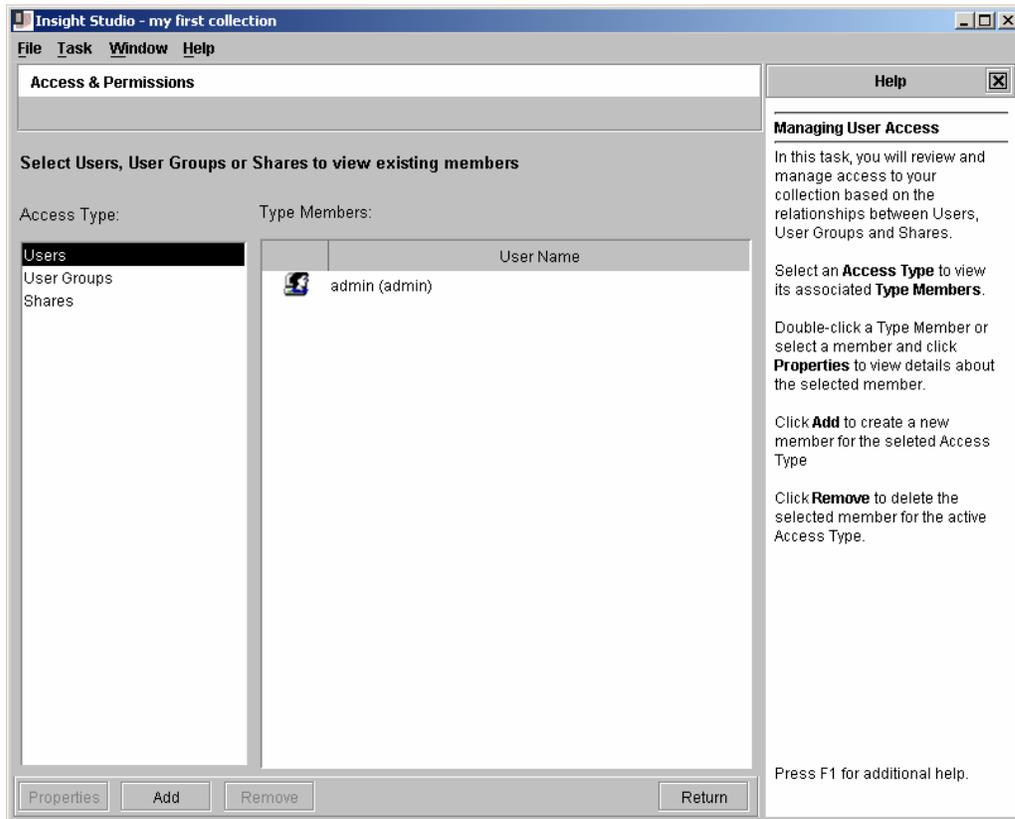
4) Press OK to save your new User Group.

5) Once you've created your new User Group, you must create a matching User Group on your User Manager before you can associate it with a user. For more information on creating a User Group on the User Manager, please see Creating new User Groups on page 98.

Introduction to User Authentication and User Management in Insight

Insight Studio's user management tools enable you to manage users, shares (common storage areas for image groups), and access to Collections within one tool. The User Manager is a separate and distinct component from the Collection or Personal Insight Manager, allowing for a single point of authentication and authorization for all of your organization's content. Insight separates the concepts of authentication, authorization and access; to enable a user's access to multiple Collections with different rights.

Authentication and Authorization are handled in the User Manager, while access and individual rights are ultimately controlled by the Collection Manager or Personal Insight Manager.



General Concepts

There are four sections in the User Manager: Users, User Groups, Shares, and Collections.

Users: Individual users within Insight.

User Groups (Authentication Groups): A group of users that are given access to a Collection. There is a 1:1 correspondence between user groups on the User Manager and those defined within a Collection on the Collection Manager (or Personal Insight Manager). You can also think of User Groups as private keys between the User Manager and the Collection / Personal Insight Manager.

Collections: The connection information used by the Insight Client to access a Collection, Virtual Collection, or Personal Insight Server. Authentication information for a Collection is stored in the User Group.

User Shares: Shared folders within Insight where users can save groups, annotations, or presentations. Users can be given Read, Write, Delete and "Create Sub-Folder" permissions with shares. Shares are associated directly with users and are available within any Collection to which a user has access.

Figure 8: Insight Authentication Process (used by the Java Client and BrowserInsight)

- 1) Insight Client Sends Username / Password to server.
- 2) Insight Client is authenticated by User Manager, and a list of Collections is returned to the user.
- 3) User Chooses which Collection(s) they want to open.
- 4) Insight Client sends User Group & Code Key to the server, server validates the user group and code key, and opens the Collection.

Authentication Models

Depending on your Institution's current authentication and authorization System, you may be able to integrate Insight directly into it. Insight supports three separate Authentication models:

Insight Authentication & Authorization: Uses the Insight User Manager for all Authentication and Authorization tasks.

LDAP Authentication: Users the LDAP Server for password authentication, but uses Insight for authorization. For more information on LDAP Authentication, please see the "Configuring Insight's Advanced Authentication Systems" section of the Installation and Configuration Guide.

Kerberos & LDAP Authentication & Authorization (Windows® Active Directory): Uses the Kerberos server for Authentication, the LDAP Server for authorization. For more information on LDAP Authentication, please see the "Configuring Insight's Advanced Authentication Systems" section of the Installation and Configuration Guide.

NOTE: If you are using Kerberos & LDAP Authentication & Authorization, then many of the changes that you may want to perform may be performed in your LDAP Directory Server as opposed to Insight. Please review the "Configuring Insight's Advanced Authentication Systems" section of the Installation and Configuration Guide.

Managing Users in Insight Studio

If you have the rights, Insight Studio enables you to manage all aspects of users, user groups, and user shares.

Basic tasks that Insight Studio can manage:

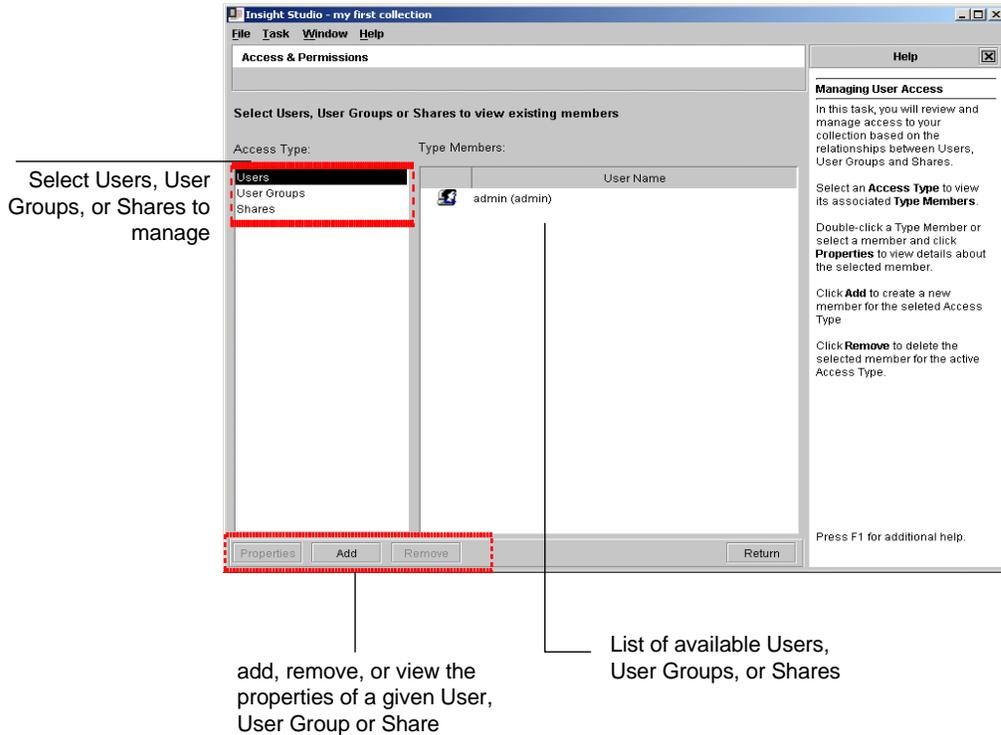
- Adding / Removing Users
- Adding / Removing Shares
- Managing User's access to Shares
- Managing a User's access to User Groups

Tasks that can only be accomplished within the Insight Administrator Tools:

- Adding new Collection Entries for Collection Managers you don't control (see page Adding a Remote Collection or New Collection Manager / Personal Insight Manager to your User Manager 181)
- Deleting Collection Entries (see page 194)
- Adding new Virtual Collection Entries (see page 186)
- Adding User Groups for Virtual Collections (see page 183)
- Adding Administrative Users (see page 111)

Introduction to the User Management Tool

The User Management tool has a similar layout to the rest of Insight Studio. Like the theme selection panel or the Cataloging Template selection panel, the User Management Tool is broken into two main panels. The left panel displays a hierarchical tree outlining nodes of User Manager responsibility: Users, User Groups and Shares. The right panel displays tables of entries contained by the node selected on the left, and provides a set of buttons to modify or delete selected entries, or to create new entries.



Opening the User Management Tool

To access the User Management Tool, you must first have permissions to manage users. For more information on user management permissions, please see [Managing Administrative Users](#) on page 110.

To Manage Users:

- 1) Open Insight Studio and log in with your administrative username.
- 2) Double-Click on the Collection you'd like to add the user to. If you are planning to manage access to multiple Collections, choose one Collection.
- 3) From the main management menu, choose manage Users and Groups.

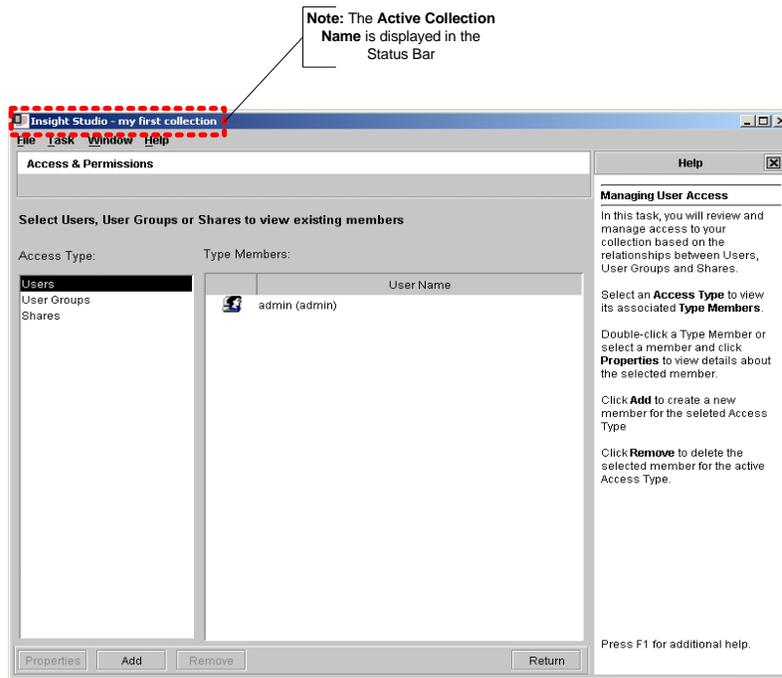
NOTE: Alternately, you can always access the User Management area via the Task Menu (under Access Management).

Adding a new User to an Existing Collection

Each user is assigned a set of User Groups and Shares (shared folders) to which they have access. Each User Group provides access to a Collection and grants the user a set of rights within that Collection.

To create a new user:

- 1) Once the User Management Tool has loaded, choose Users from the list of management tasks.



- 2) Press add to add a user.

The screenshot shows a dialog box titled "User Properties - New User". It has three tabs: "General", "Member Of", and "Share Access". The "General" tab is selected and contains the following fields: "Log-in Name:", "First Name:", "Last Name:", "Password:", "Re-enter Password:", "Organization:", "E-mail:", "Telephone:", "Address:", "City:", "State:", "Zip Code:", and "Country:". Each field has a corresponding text input box. At the bottom left of the dialog, there is a note: "Login name may not be blank". At the bottom right, there is an "OK" button.

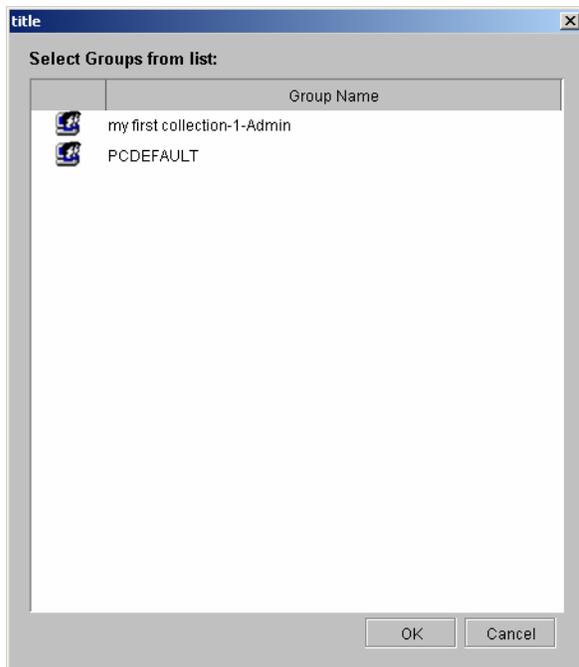
3) Provide a login name, first name, last name, and password.

NOTE: the information placed in the User Manager database is used to populate various forms in Insight, for example, the annotation information.

4) Select the Member of tab to assign the User to User Groups (which are in turn assigned to Collections).



- a. Click "add" to assign the user access to one or a set of User Groups.



- b. Select one, or a set of User Groups to grant the user access to specific collections.

NOTE: You can select multiple field groups by holding down CTRL.

NOTE: User Groups created by Insight Studio (one is automatically created for each new collection if you have rights) will start with the collection name, we suggest you continue this convention for ease of determining what User Group maps to what collection.

c. Click OK to add access to the User Groups.

5) Select the Share Access tab to assign the User rights to Shared Folders.



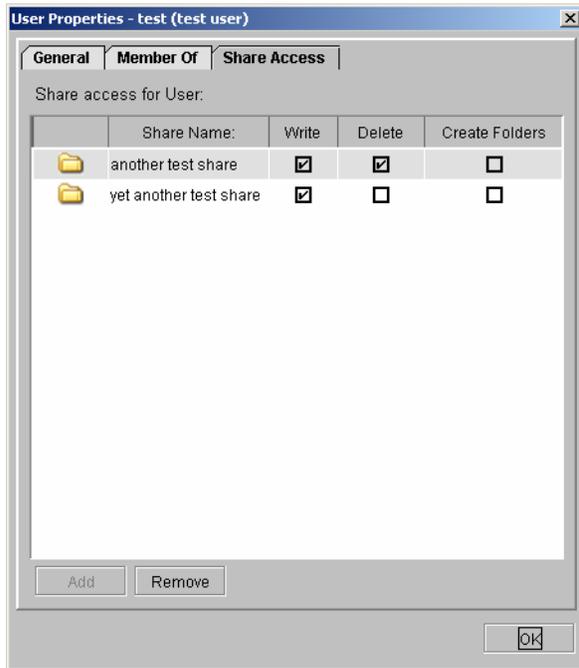
a. Click "add" to add access to a share for your user.



- b. Select the Shares you wish to grant the user access.

NOTE: You can select multiple field groups by holding down CTRL.

NOTE: The user will have access to each share collected within ANY collection they have access.



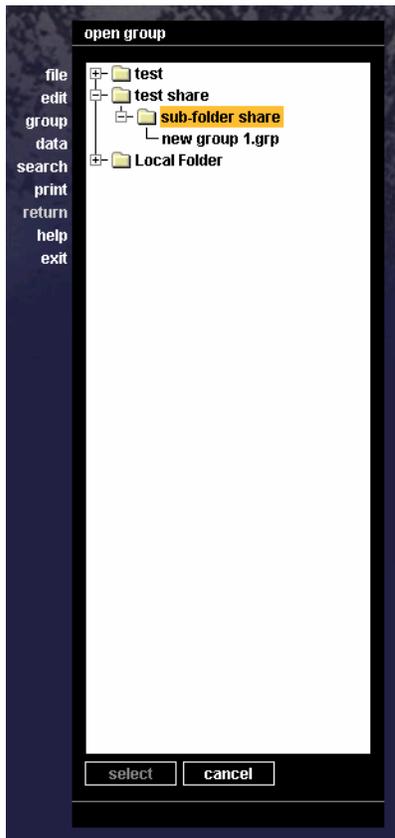
- c. Click the checkboxes to assign write / delete permissions.
- d. Enabling “**Create Folders**” will allow the end-user to create sub-folders inside the share.

NOTE: By granting access to the share, you have automatically granted the user the READ permission.

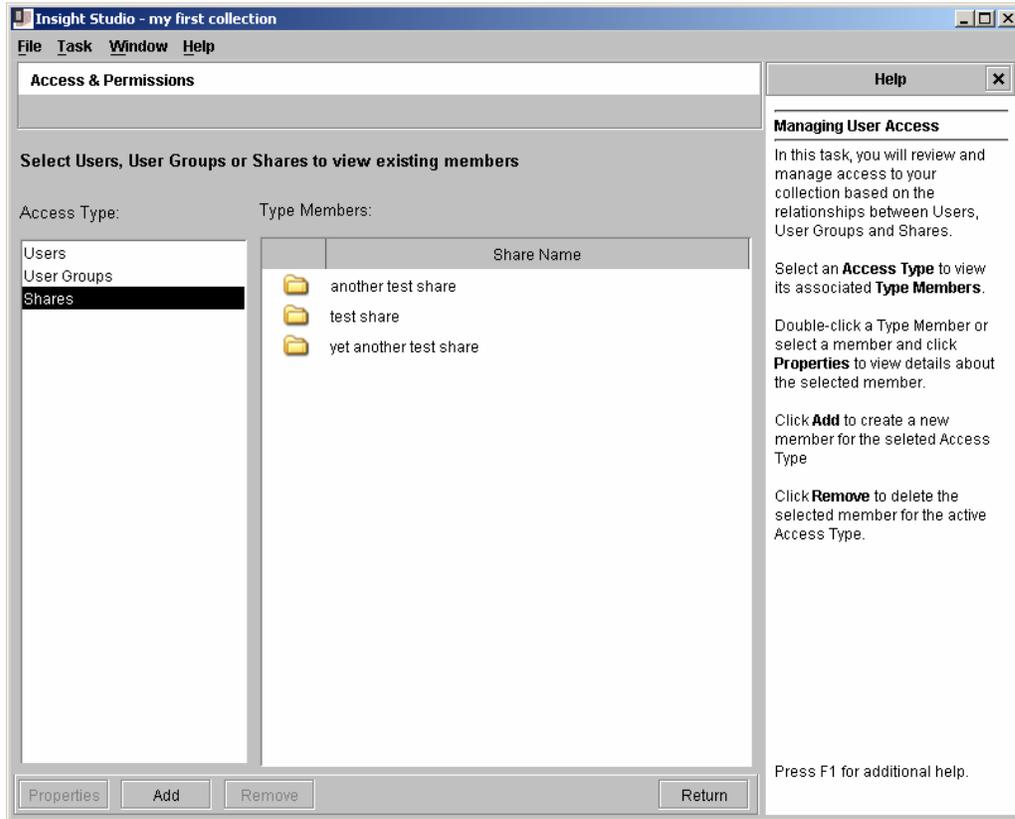
- e. Click OK to add the user.

Creating New Folders

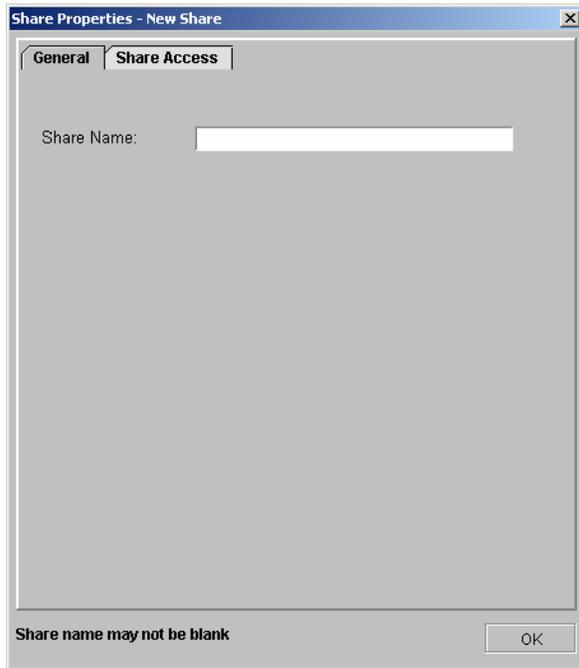
Once a User Share is created, users who have the permission to create “**Folders**” can create and manage any sub-folders within that share. See below for an example.



See above for granting users the right to create folders.



- 1) Press add button to add a share.



2) Name your share.

- 3) If you want to add users to this share immediately:
- Select the Share Access tab



- b. Press add



- c. Select the users you wish to add to the share.

NOTE: To select multiple users immediately next to each other in the list, select the first user, then hold down shift and select the last user.

NOTE: To select multiple users that are not next to each other in the list select the first user, then hold down control (CTRL) and select each of the other users you wish to add.

- d. Click OK to add your share.

Creating new User Groups

User Groups are used to manage access to Collections. On a Collection Manager, User Groups are associated with profiles (which assign rights to that group). On the User Manager, User Groups are assigned to Users.

NOTE: There is a 1:1 correspondence between User Groups on the Collection Manager and the User Manager. In order to login, you MUST have both.

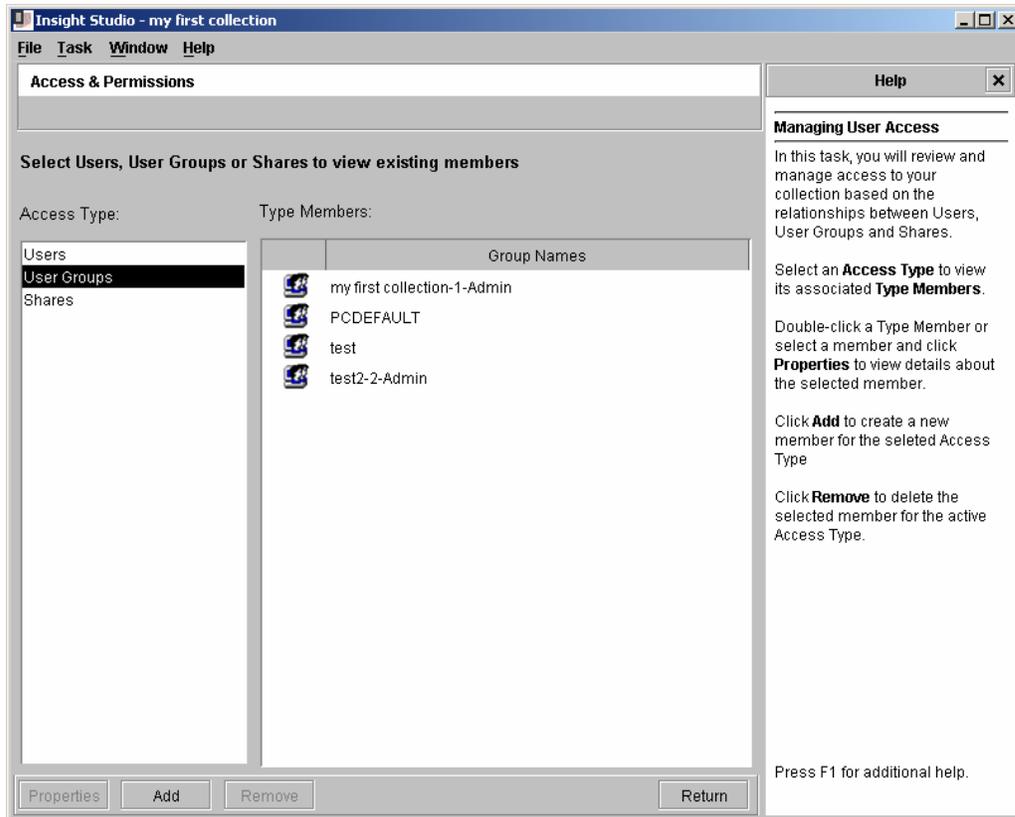
Before you can create a User Group on the User Manager, you must create a User Group on the Collection Manager. Please see (Managing Access Permissions on page 80 for more information).

To create a new User Group on the User Manager:

- 1) Launch Insight Studio and connect to the Collection that you wish to add the new User Group.

NOTE: If you are adding a User Group to a Collection that you do not manage (have administrative access to) you must add the User Group in the Insight Administrator Tools (see page 183).

- 2) Once the User Management tool has loaded, choose User Groups from the list of user management tasks.



- 3) Press add to create a new User Group on the User Manager.

The screenshot shows a dialog box titled "Group Properties - New User Group". It has two tabs: "General" and "Members". The "General" tab is active. It contains four input fields: "Group Name:", "Display Name:", "Access Key:", and "Description:". The "Description:" field is a larger text area. At the bottom right is an "OK" button. At the bottom left, there is a message: "Group name may not be blank".

- 4) Enter the Group Name and Code Key (must match exactly with Group Name and Code Key on the Collection Manager).



WARNING: Group Name and Code Key are Case Sensitive. Differences in case will not match and users will not be able to login.

- 5) Enter a description and display name.
- 6) Either press OK to add the user group, or select the members tab to add specific users to the user group.

NOTE: To select multiple users immediately next to each other in the list, select the first user, then hold down shift and select the last user.

NOTE: To select multiple users that are not next to each other in the list, select the first user, then hold down control (CTL) and select each of the other users you wish to add.

Deleting User Groups

To Delete User Groups, use the Insight Administrator Tools. Please see Deleting User Groups on page 185 for more information.

Adding new Collection or Personal Collection Managers after Installation

Insight Studio currently can not add new Collection references to your User Manager. Without the address information contained in references to Collection Managers (and Personal Insight Managers), the User Manager can not direct Users to Collections.

To add a new Collection to your User Manager, use Insight Administrator Tools. See Adding a Remote Collection or New Collection Manager / Personal Insight Manager to your User Manager on page 181 for more information.

Cleaning Out Insight Shares

Sometimes you need to clean-out shares, delete saved groups in a set larger than is manageable in the Java Client or Browser Client. In these cases, you can manage the groups a different way – on the file system.

- 1) If you have access to the machine running the User Manager, then locate the **user_manager** directory in the **LunaImaging/5.1/** directory.
- 2) Inside the **user_manager** directory, locate the **Image-Group-Files** directory
- 3) The **Image-Group-Files** directory contains one directory per Share. Inside each share is a File for each Group.
- 4) Delete or back up User Groups as needed.

NOTE: you may see **.lst** files – these contain lists of presentations in a group and are created by the server for quick access.

Working with Personal Insight Managers

Personal Insight Managers are almost identical to Collection Managers. They use the same configuration files, store images in the same places, and function in very similar ways. Personal Collections, however, have fewer configurations and maintain less complex Cataloging Templates.

Managing Personal Insight

Personal Insight Collections, like normal Collections can be managed in the Insight Administrative Tools. Also, within the Java Client, end users may change the Collection Description.

Creating a Custom Background Image for a Personal Collection

A custom background image for the Java Client and Browser can be specified in the Insight Administrator Tools. For instructions on configuring a personal collections' background image, please see Collection Backgrounds in Insight 5 on page 196.

Creating Cataloging Templates

Cataloging Templates for Personal Insight can be created using Insight Studio exactly as Cataloging Templates are created in normal Collections. The main difference between cataloging templates in Personal Collections and normal Collections is that Cataloging Templates for Personal Collection are flat. Regardless of the number of Field Groups you may add, all of them will be merged into the same record / form – as if they all reside within one Field Group within the data window.

Managing Personal Insight User Groups

User Groups in Insight logically organize users with a common set of permissions and privileges. User Groups in Personal Insight extend the normal use by allowing an administrator to organize access to a set of Collections for a specific group of users. Users who have access to a Personal Insight User Group can (if they have permissions) see all of the Personal Collections created by any other user within that User Group.

Use Scenarios for Personal Insight User Groups

Scenario 1: Allowing a set of Users to see each other's Personal Collections

If you wish to allow a set of users to collaborate or share access to each other's Personal Collections, then assign all of the user's access to the same user group. Next, ensure that each of them has the rights to create Personal Collections.

Scenario 2: Limiting access to Personal Collections to just the creator

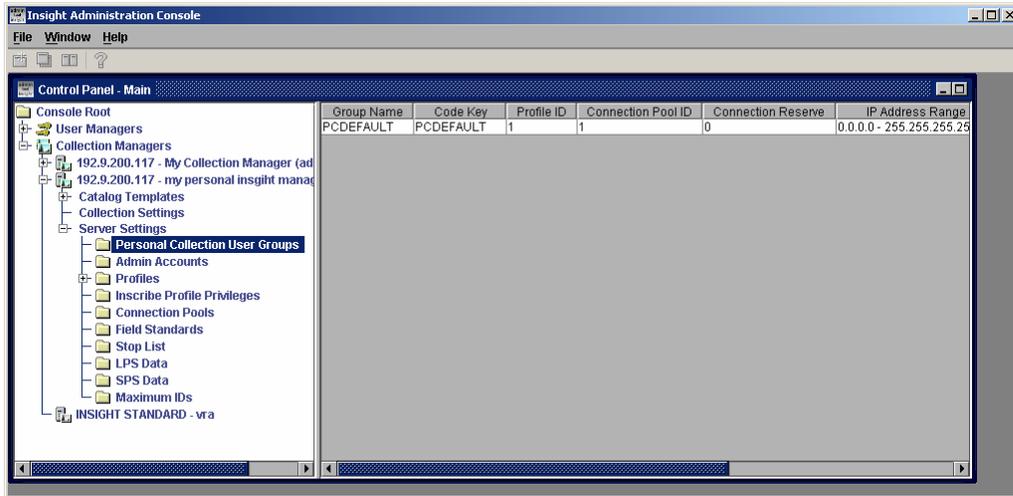
If you wish to restrict a user to only see their own Personal Collection(s), then create one User Group for each User. Next, ensure that each of them has the rights to create Personal Collections.

Creating Personal Insight User Groups

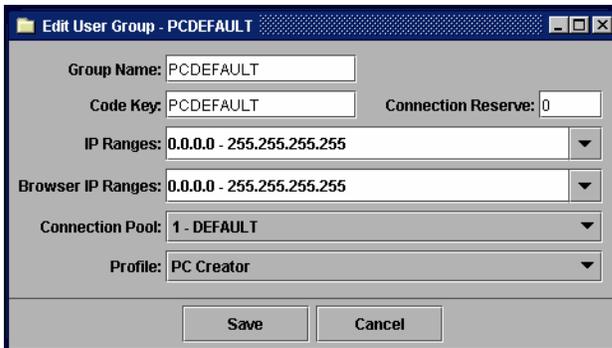
As described above, administrators can create Personal Insight User Groups to organize users.

To create a new Personal Insight User Group:

- 1) Open the Insight Administrator Tools.
- 2) Connect to your Personal Insight Manager.
- 3) Open the Server Settings node.
- 4) Click on the Personal Insight User Groups node.



- 5) Right-Click on a Personal Insight User Group to create a new User Group, or select an existing one from the list on the left.



- a. Associate the User Group with a profile.
 - b. Choose a Group Name and Code Key.
 - c. Apply any IP Address Restrictions. (see Adjusting the IP Address Restrictions for a Collection on page 174 for more information).
 - d. Press Save.
- 6) Connect to your User Manager and click on the User Groups node.
 - 7) Add a matching User Group to the one you created in your Personal Insight Manager.

Associating Users with a Personal Insight User Group

Once you have created the Personal Insight User Group, you can associate users with the User Group in either the Administrator tools or insight Studio.

- For more information on using the Insight Studio to associate Users with User Groups, please see Adding a new User to an Existing Collection on page 89.
- For more information on using the Administrator Tools to associate Users with User Groups, please see Adding Users and Managing Access to Insight Studio and the Insight Administrator Tools on page 111.

Moving a Personal Collection to a different User Group after it has been created

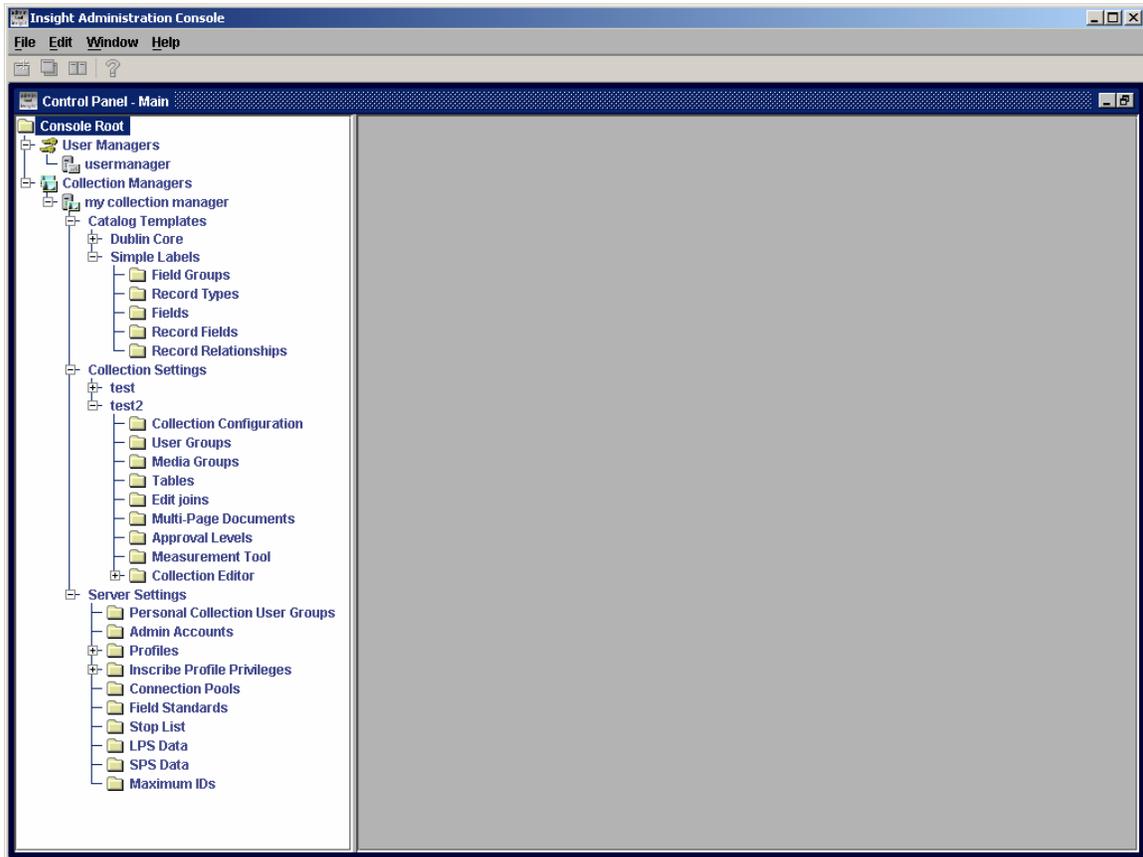
Please contact Luna for more Information on moving a Personal Collection between User Groups.

Tasks Available Only in Administrator Tools

The Insight Administrator Tools allow administrative (backend) management of the Insight database. Unlike Insight Studio, which communicates with the User Manager, Collection Manager and Personal Insight Manager, the Administrator Tools interacts with the database directly. Administrator Tools predate Insight Studio and currently contain features and functions not yet available in Insight Studio.

Common Tasks you may need to perform using the Insight Administrator Tools:

- Adding an administrative user
- Adding a new reference to a Collection
- Changing the properties of a Cataloging Template
 1. adding a new field
 2. changing the display properties of a field
 3. changing the validation rules for a field
 4. deleting a field
- creating a multi-page document
- configuring the measurement tool
- managing personal Collection user groups
- Batch media processing using Mr. Sid encoding



Installing the Insight Administrator Tools

The Insight Studio installers can be found in the `admin_tools` directory of CD2 - Clients. The installers are platform-specific and are separated into directories specific to each platform.

Running the installer

Double-click the installer appropriate to your platform:

Platform	Location
Windows	(CD2-Clients) \admin_tools\Windows\installAdminTools.exe
Mac/OSX	(CD2-Clients) \admin_tools\MacOSX\installStudio.zip
Solaris	(CD2-Clients) /admin_tools/Solaris/InstallAdminTools.bin
Linux	(CD2-Clients) /admin_tools/Linux/InstallAdminTools.bin

It may take a few minutes for the Installer to load.

The Installer runs in a series of panels, the first of which is an introduction. A panel index runs down the left edge of the display to let you know where you are in the process. You can always go back to previous panels and page back forward through panels you have already completed (the Installer will retain your selections). The Installer will not let you step past a panel when it needs information from you. Default values are provided on most screens. Documentation later in the manual will often assume that default settings have been used.

Selecting an Installation Type

The difference between a Typical and Advanced install set is subtle. Though both sets in fact install the debug console, the difference is in how debug console is invoked when running the Administrator Tools:

Typical

Administrator Tools will run without displaying the debug console unless the CTRL key is held down during startup.

Advanced

Administrator Tools will always display the debug console on startup.

Choosing an installation Location

Installation of the Insight Administrator Tools can take up to 50MB, please plan accordingly when installing the server components. A default installation location will be offered on the Choose Install Folder panel, change as needed.

Creating a Shortcut Folder

The installer can create links to Insight Administrator Tools and documentation. Choose the location for the links.. On Windows, the default is to place a Shortcut to the Insight Administrator Tools into the Luna Imaging program group, if present.

Configuring the Insight Administrator Tools

A full installation or upgrade of 5.1 Server Components should automatically configure the Administrator Tools on the server with access to your Collection, Personal Insight, and User Managers. As you install new Collections, the installer will add entries for each Collection you install or upgrade on this version of the Administrator Tools.

Copying the insightadminstore.dat configuration file

The quickest method to configure a new version of the Insight Administrator Tools is to copy `insightadminstore.dat` file from an existing version of the Administrator Tools.

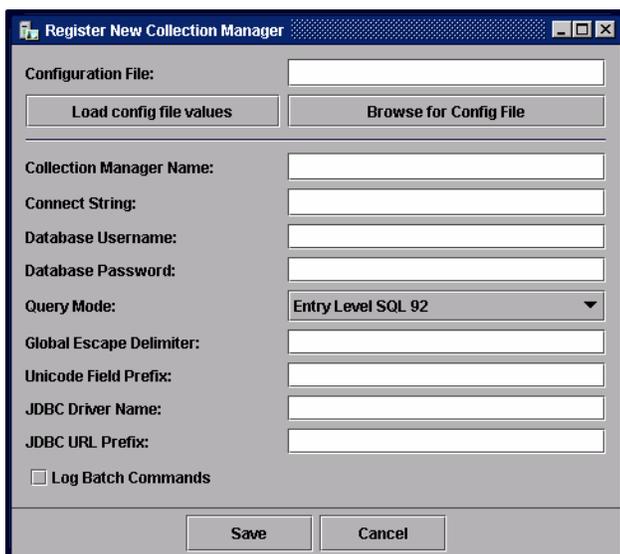
To copy `insightadminstore.dat`:

- 1) locate the existing installation of the Insight Administrator Tools
- 2) Find `insightadminstore.dat` in the installation directory.
- 3) Copy it to your network or to disk so you can transfer it to the other machine.
- 4) Copy `insightadminstore.dat` from your network or disk to the installation directory for your new machine.
- 5) Start the Insight Administrator Tools.

To Add a New Collection, User, or Personal Insight Manager Manually:

If you need to add a Collection, User, or Personal Insight Manager manually:

- 1) Right-click on the Collection or User Manager node and select Register new from the pop-up menu.



The screenshot shows a dialog box titled "Register New Collection Manager". It contains the following fields and controls:

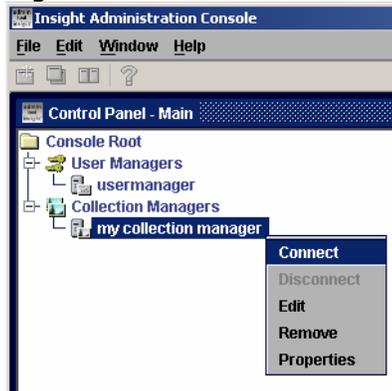
- Configuration File: [Text Box] [Browse for Config File]
- Collection Manager Name: [Text Box]
- Connect String: [Text Box]
- Database Username: [Text Box]
- Database Password: [Text Box]
- Query Mode: [Entry Level SQL 92]
- Global Escape Delimiter: [Text Box]
- Unicode Field Prefix: [Text Box]
- JDBC Driver Name: [Text Box]
- JDBC URL Prefix: [Text Box]
- Log Batch Commands
- [Save] [Cancel]

- 2) Provide a name for your Collection or User Manager.
- 3) Provide connection information. This can be found in the configuration file for the server component (in the `insightServer.dat` file in the server component's installation directory). Once you have the database connection information, enter the connection string, database username & password, query mode, driver name, and driver URL prefix.

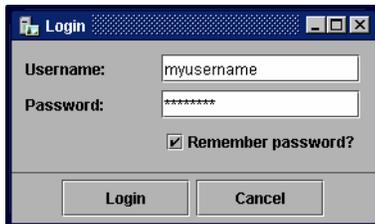
- 4) Press Save.
- 5) The Insight Administrator Tools should have added a new entry in the list with the Collection, User, or Personal Insight Manager you just added.

To connect to a User, Collection, or Personal Insight Manager

- 1) Right click on the desired node (User, Collection, or Personal Insight Manager)



- 2) Choose Connect from the pop-up menu.



- 3) Enter the administrative username and password.

Managing Administrative Users

The Insight Administrator Tools manage all points of access for administrators and grant access to read or modify Collection and User Manager configurations. The Admin Accounts section of the Insight Administrator Tools is also where you control access to Insight Studio.

Adding Users and Managing Access to Insight Studio and the Insight Administrator Tools

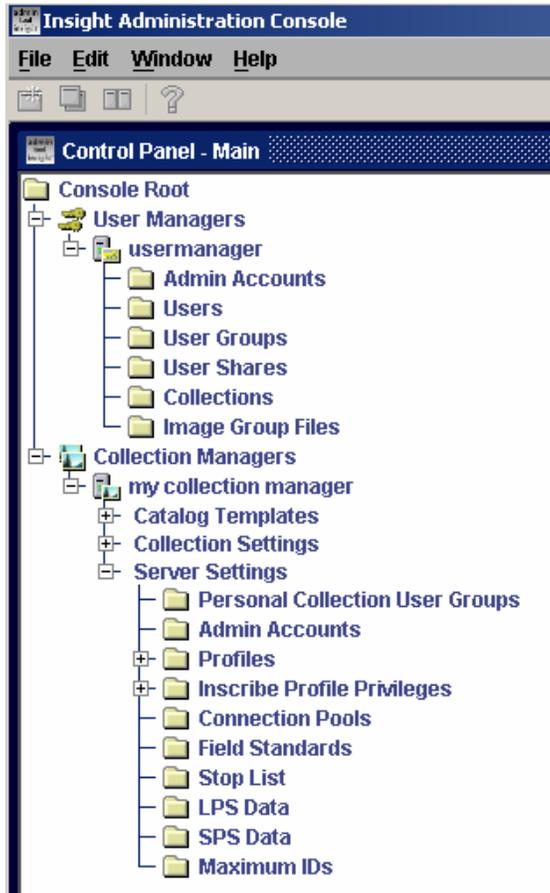
The Insight Administrator Tools are quite powerful. They enable users to manage Insight's environment and to add, remove, and modify content in Insight Collections. Be careful who you grant access to.

As different users may not need access to all Insight components, access is granted component by component. Access rights vary slightly between User Managers and Collection / Personal Insight Managers, but the process is essentially the same.

NOTE: Insight Studio not only requires an entry in the Admin Accounts, but a matching entry in your User Manager's "User List"

To add a user:

- 1) Start the Insight Administrator Tools.
- 2) Connect to the User, Collection, or Personal Insight Manager.
- 3) Select the Admin Accounts node.



User Manager: Admin Accounts is the first node under the expanded User Manager node.

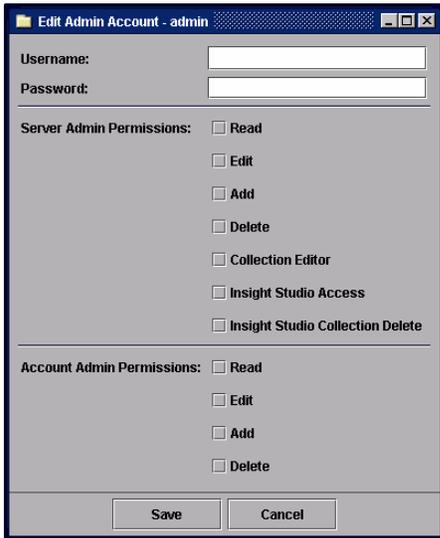
Collection / Personal Insight Manager: Admin Accounts is under Server Settings for your Collection / Personal Insight Manager. You will need to expand Server Settings to see Admin Accounts.

- 4) Right-click on the Admin Accounts node to add a new Admin Account. If you want to delete or modify an existing Admin Account, right-click on the entry in the list on the right and choose edit or delete.
- 5) Enter the Username & Password for the Admin Account you wish to add. Then grant the Admin Account the specific permissions you want.

Figure 9: Admin Account Settings for User Manager



Figure 10: Admin Account Settings for Collection Manager



- a. Server Admin Privileges: These are the access rights to User, Collection, and Personal Insight Managers. Rights can be separately assigned for viewing, editing, and deleting entries in the Managers, Collection Editor (Running the indexer and Mr. Sid or JPEG2000 Media Processing), access to Insight Studio, and Collection Delete Permissions.
- b. Account Admin Permissions: These are the permissions to add, modify, or delete Administrative Users.

- 6) Add the same user to the "user list" in your User Manager if you have not already. (for instructions on adding a user to the user list, please see Adding / Editing a User and Assigning Access to Collections Using User Groups in the Insight Administrator Tools on page 184).

Insight Administrator Tools by Section

The Insight Administrator Tools break up Insight backend management into small tasks, and allow administrators to adjust all aspects of Insight. Below is a list of each of the sections and an explanation of what can be accomplished in each.

User Manager

User List: The list of users for Insight.

User Groups: User Groups provide a backend handshake between a User Manager and a Collection Manager. You can associate User Groups with a set of users to grant access to Collections.

User Shares: Allows you to create and manage the shared directories in Insight.

Collections: Allows you to add / remove Collection references from the User Manager.

Image Groups: If you run the Insight Administrator Tools from the same machine as the User Manager, you can manage the User Manager's image groups.

Collection Manager

Cataloging Templates: Cataloging Templates are separate from Collections to enable you to reuse metadata schema across Collections.

Field Groups: Field Groups are used to define related fields that should always be displayed together. Field Groups may be different from record types, which allow data to be displayed differently than how it is stored.

Record Types: Record Types are associations of fields grouped for data organization. Record Types represent the logical underlying structure of the metadata schema.

Fields: Fields are the lowest level representation of data. The Fields section (as opposed to Record Fields and Standard Fields) represents the basic information about a field. Fields contains low-level information as well as browser attributes.

Record Fields: Record Fields define data validation rules for a field.

Record Relationships: Record Relationships define connections between different record types.

Collection Settings: Collection settings are Collection specific:

Collection Configuration: Here are the basic attributes of a Collection, including display information, background image, Remote Launch Information, and other basic Collection information.

User Groups: User Groups provide a backend handshake between a User Manager and a Collection Manager. On the Collection Manager, User Groups are associated with Profiles which allows assignment of rights and privileges to a logical group of Users (or to an individual User).

Media Groups: There are three types of media groups: temporary groups (created and deleted during user sessions), groups (which are the same as groups created in the Insight Java Client), and Collections (which are just a special type of group).

Tables: Tables represent physical tables in the database, and are used to map fields and record types from Insight to the database.

Edit Joins: Joins map fields in Insight to tables (which ultimately connect them to the database). There are two types of joins:

Read-only joins allow Insight to act as a read-only “published” view of an existing database (non-Insight tables)

Read-Write joins allow Insight to both read and write to an existing database (non-Insight tables)

Multi-Page Documents: The Multi-Page Document tool enables administrators to create multi-page documents or document templates. Once the structure of each multi-page document has been specified, Administrators will need to run the Indexer in order to make them visible within Insight.

Approval Levels: Approval levels allow you to control data and media publishing privileges for users.

Measurement Tool: The measurement tool enables you to auto-populate the Measurement Tool in the Image Workspace with values in your data.

Collection Editor:

Indexer:

1. Creates multi-page documents based on the structures identified in the Multi-Page Document Tool.
2. Manually parses fields marked as containing “Fuzzy Dates” and enables them to be searched using natural language date values.
3. Updates thumbnail caches (performs a soft-restart of the Collection Manager).
4. Imports data from a set of existing external data tables

Media Batches: All media processed using Insight Studio and the Administrative Tools are processed in Batches. The Media Batches tool enables users to publish, review, and link these batches.

Media Processing: Media processing enables you to import batches of media and create the set of Insight derivatives including either a Mr. Sid file or JPEG 2000 file.

Server Settings: these settings are Collection independent:

Personal Collection User Groups: This option is only available on a Personal Collection Manager. Personal Collection User Groups provide a backend handshake between a User Manager and a Collection Manager.

Admin Accounts: Admin Accounts allow you to grant or restrict access to the Collection Manager via the Insight Administrator Tools and Insight Studio.

Profiles: Profiles enable you to create a basic set of privileges for a set of users. Profiles control access to features within Insight and map to SPS's which associate with a Media Manager. Profiles also have a 1:1 association with Inscribe profile privileges, controlling access to Inscribe.

Inscribe Profile Privileges: Inscribe Profile Privileges enable you to control access to Inscribe, including who has the rights to view, add, modify or delete records, or to process media.

Connection Pools: Connection Pools place a limit on the number of connections a Collection Manager can support simultaneously.

Field Standards: Field Standards provide access to two areas:

- a) field properties in the Insight Java client.
- b) mappings for Cross-Collection searching.

Stop List: the Stop List contains a list of words that should not be indexed in the search tool. Stop lists often contain commonly used words like "and", "or", or "the".

LPS Data: LPS data is one component of a Media File's URL. Commonly, the LPS Data for an image matches the Media Processing Batch and Collection Identifier.

SPS Data: SPS Data allows you to map the base set of URL's for an image. There is at least one SPS entry for each media file size and type. SPS's ultimately allow you to distribute media across multiple machines.

Maximum ID's: Maximum ID's represent internal keys for Insight.

Media Processing

LPS, SPS and Image Files

Insight accommodates a wide range of storage structures through the use of a segmented URL path. Any time a piece of media is requested within Insight, these segments are joined together to form a whole URL path to the requested media.

The segments are referred to as SPS (Storage Path Segment), LPS (Logical Path Segment), and filename. The SPS refers to the machine on which the media resides. The LPS refers to the subdirectory structure between the SPS and the filename.

The following is an example of how this URL is formed:

<http://Insight.lunaimaging.com/size4/Disc0004/00044001.jpg>

In the example above, the SPS is <http://Insight.lunaimaging.com/size4/> the LPS is Disc0004 and the filename is 00044001.jpg

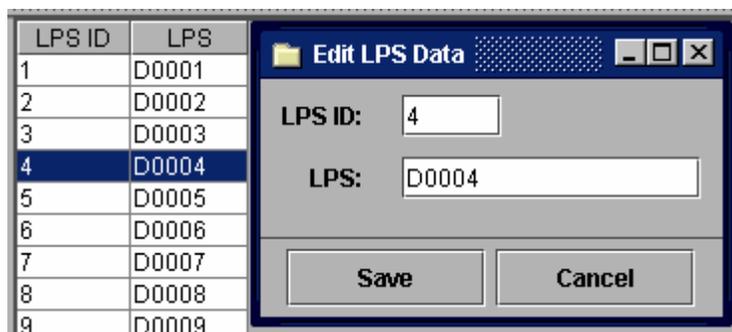
To understand this even further, you will need to look at the underlying table structure. All media content contained in Insight must have references in the IRImageFiles table. This table is key to the retrieval of media within Insight. This information is produced by the Media Batches tool within the Collection Editing section of Admin Tools. Information from the IRImageFiles table provides a map for the retrieval of media content within Insight. The following pieces of information are pulled from this table, based on the ImageID.

- 1) A size identifier (0-8) identifies which size will be retrieved. The size will determine which SPS is used.
- 2) LPSID determines which LPS to use.
- 3) Format help to specify the appropriate SPS.
- 4) File Name determines which file to load.

Create New LPS

The LPS (Logical Path Segment) refers to the subdirectory structure of images and refers to the intermediate directories between the SPS and individual media files. Any directory structure can be accommodated within Insight. Some Insight installations opt to create directories according to internal directory structure conventions. The LPS Data tool permits administrators to create and manage the LPS IDs and LPS names for a particular collection.

- 1) Right click the **LPS Data** folder on the navigation tree to create a new LPS reference.
- 2) Select New and a blank Edit LPS Data console will be available.
- 3) LPS ID – Enter the logical path segment (LPS) ID. The LPS ID field will only accept an LPS ID not already in use.
- 4) LPS – Enter the logical path segment (LPS).
- 5) Once the Edit LPS Data console has been configured properly, click Save.



Edit LPS Reference

To edit an existing LPS reference, follow the steps below:

- 1) Select the LPS Data folder on the navigation tree. Double-click the record set you wish to edit.
- 2) The LPS value describes the directory structure or path to a set of media files. In order for Insight to locate and display an image, the URL to the image must be accurate. The Admin utility's Media Batch tool automatically enters the LPS values when you process a batch of images or media files.
- 3) A case where you may need to edit an LPS value is if you renamed the output directory. You would need to change the LPS to reflect the change to the file system directory.

Create New SPS Reference

The Storage Path Segment (SPS) refers to the machine on which the images accessed in Insight reside. This is a partial URL to the media files stored on the image server. To make a complete URL, the system combines the following:

SPS/LPS/File Name

SPS can be used to direct clients to different locations for image retrieval.

- 1) Right click the SPS Data folder on the navigation tree to create a new SPS reference. Click New and a blank Edit SPS Data dialog appears.

- i. SPS Number - If you are creating a new SPS grouping, use a new SPS Number (numeric value identifying a SPS group) and make sure to create a SPS reference for each media type and size you need.
 - ii. Resolution Size.- This numeric value (0-8) represents the Insight image size (see Table 14: Image Sizes In Insight on page 239 for exact sizes).
 - iii. Collection ID - Provide a numeric value for the collection.
 - iv. Media Type - Choose the appropriate Media type.
 - v. Format - Select the appropriate Format type.
 - vi. URL - Provide the URL that points to source images for this size.
- 2) Once you have completed your edits, click Save to apply the changes. You will need to repeat this process for each image size and for each multimedia format.

Review SPS Reference

To review an existing SPS reference:

- 1) Select the SPS Data folder on the navigation tree, and double-click the record set you wish to edit.
- 2) The selected SPS field values will appear in the Edit SPS Data window.
- 3) After making the desired edits, click Save to apply changes. To close the window ignoring any edits, click Cancel to return to the main dialog panel.

Processing MrSID Files Using the Insight Administrator Tools

The purpose of the Media Batch utility is to automate the process of generating derivative images and media files from batches of source images.

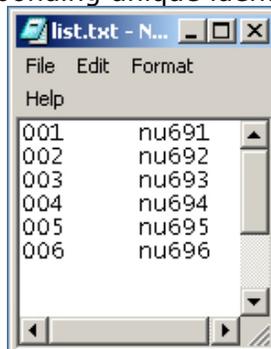
Processing a Media Batch

To process a new batch of media files for integration into Insight:

- 1) Organize the data and media which you would like to process. Make sure that you have a unique identifier in the data which relates to the images you wish to process. Choose a data field that uniquely identifies a data record that relates to only one media record. (You can process more than one media record to one single data record, but this is rare.)

NOTE: It is recommended that you have descriptive data and related media identifiers (unique identifiers) loaded into your database before you process your media.

In the example below, the names of the media are in the left column and the corresponding unique identifiers are in the right column.



- 2) The Media Batch tool can only match to indexed data. If not already indexed, index your data. (Please see Using Insight's Indexer on page 153 for more information)
- 3) Use the Media Batch Tool to process the media.
 - a. In the Insight Administrator Tools, connect to your Collection Manager.

- b. In the Collection Manager, open the Collection Editor folder
- c. Right click **Media Batches**, and select New.
- d. The Media Batch Window opens.

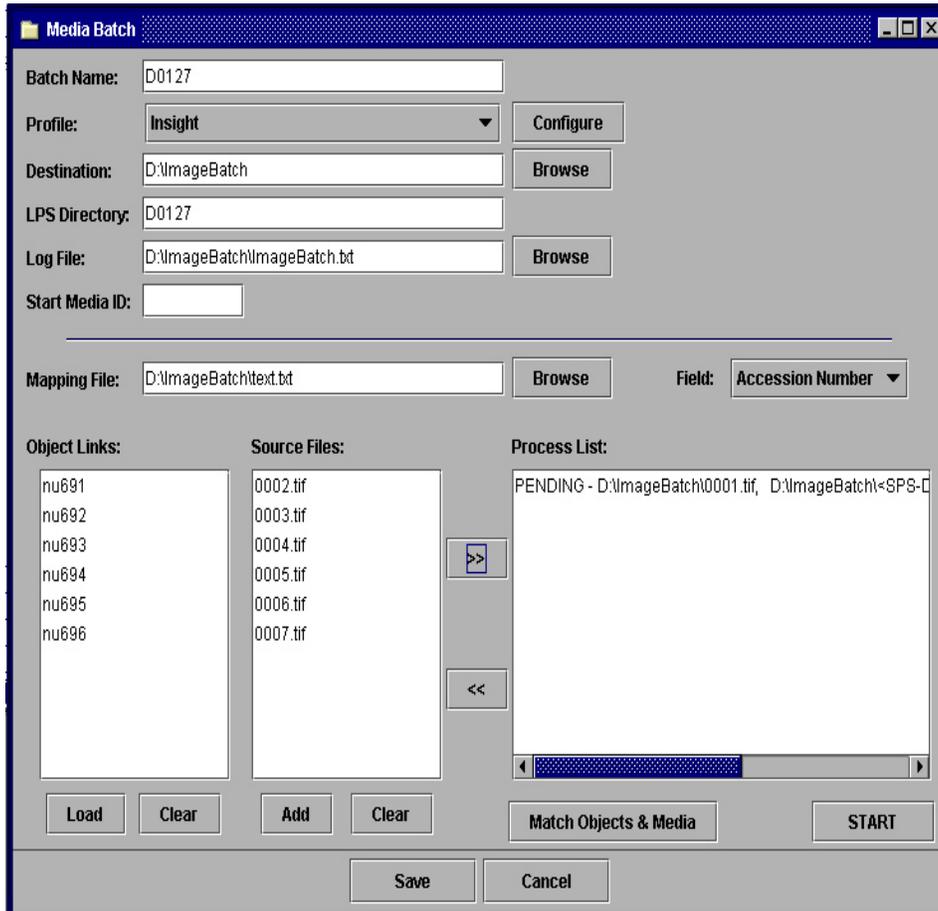


Figure 11 - Processing a Media Batch

All fields are initially empty in the form for creating a new media batch, except for the LPS Directory field. LPS Directory provides the logical path structure to the derivative images being generated. The LPS is used in conjunction with the storage path segment and the filename to generate the media file URL during an Insight client session. The LPS Directory is auto-generated when a new Media Batch is opened. This is to prevent inadvertent deletion of a former LPS or creation of a duplicate LPS ID.

You can change the LPS Directory by editing the Maximum IDs node in Administrator Tools.

In the following example, we would like the next media batch to have an LPS Directory of D0030. Setting Max Batch ID to 29 will achieve this.

Max Group ID	Max Batch ID	Max Media ID	Max User ID	Max Change ID	Max Search Query ID
1000	29	9637	0	0	0

Figure 12 - Maximum IDs

NOTE: Change **Max Batch ID** instead of changing the LPS ID directly in Media Batch tool. Managing Batch ID's centrally prevents duplication of LPS ID's in your Collection.

Once you have changed your Max Batch ID, open a new Media Batch. You do not need to rename your LPS Directory. You may want to avoid creating repeating LPS Directories for more than one Media Batch.

To view the LPS ID and LPS's already in use, go to the LPS Data node for the collection in Insight Administrator Tools.

- 4) *Batch Name* - The Batch Name serves as a unique identifier for the group of source media to be processed. This name should reflect the media that you are processing. For example, if you are processing maps, you may want to name the batch **Map**. Also, naming the batch the same name as your LPS Directory may help cut down on confusion.
- 5) *Profile* - The profile defines the set of derivative images to be generated for each source media file and provides a set of processing rules, such as stored filenames and directory structures. You have the ability to create profiles for any situation, which allows for selection of an appropriate derivative scheme for any Media Batch.

NOTE: See Creating an Image Profile (on page 130) for more information.

- 6) *Destination* - The destination directory is the location on your local file system where the derivative images should be written. The destination may be the final destination on your server or it may be a temporary destination for the images. When processing is complete, you will want to move the processed media to its final location, which is entered in the SPS Data folder (see Review SPS Reference on page 119).
- 7) *LPS Directory* - Verify if this directory is correct. See step 3 for instructions to change the LPS directory. Make sure you do not assign an LPS that has already been used in this Collection.

- 8) *Log File* - Choose the location and name of the Log File. The log file is a tab-delimited text file that is generated from the media processing activity. Name the log file something that easily relates to the media you are processing, such as the Batch Name or LPS Directory name (use a .txt or .log extension). This will minimize the chance of confusion with other log files.

The field values generated are: Date/Time, Source File, Resolution Size Being Generated, Output Directory, Derivative File Name, Scale Ratio, Width, Height, Compression Level, and Quality Level. You may import the log files into a database table to track processed source files and the generated derivative images.

By default, the Log File is saved in the installation directory. To override the default location, press Browse on the Media Batch console.

- 9) **(Optional)** *Starting Media ID* (numeric value) - Generated media names will begin with the specified Starting Media ID (if it is not already in use). Not specifying a Starting Media ID results in the highest available ID being used.

Example: If the available ID's are 423, 645, and 800; the system will use ID 800.

- 10) *Mapping File*- The mapping file is a two-column, tab-delimited text file. It lists the source media file (minus the file extensions) in the first column; and the object link value (such as accession) in the second column. This tab-delimited text file should be created by the administrator. The mapping file facilitates the linking of descriptive object records to media files.

The mapping file lists the name of the media that you would like to process, minus the extension in the left column, and the unique identifier that is in the database in the right column. This mapping file is what creates the link between the data and the processed media in your database.

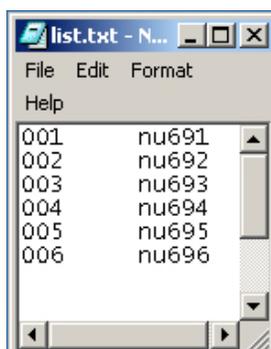


Figure 13 - Mapping File

To create the mapping text file, open a spreadsheet application and list the source media files to be processed in the first column. Next, in the second column, provide the object link value associated with the appropriate source media file. Save the file to your file system as a text (.txt) file, then select Browse from the Media Batch configuration window and navigate to it. Select the mapping file, then click load under the Object Link list.

- 11) *Field* - The field function enables you to choose which data field the Object Links and Source Files will link to the media. Choose a field by clicking on the visible field name. This field is now available for linking. Only one field may be chosen from the drop down list.

For example, a user would like to process an image, which has an object link named **nu689**, which will be linked to a source file called **figure14.jpg** (object links and source files are explained later). They know that the field Accession Number (which is available from the drop down box to the right of Field:) contains an object record named **nu689** in the database. This link between the object link **nu689** and object record in the field called Accession Number is confirmed once the user presses Match Objects & Media. This button will display all object links that have a corresponding link in the database based on the field they selected.

If the particular object does not have a link, it will not be automatically moved to the Process list (database) once the Match Objects & Media button is selected. You will still see it in your Source File list.

If you would like to select a field that is not in the Field list, you will need to add that field and data into your database. You will need to re-index before it will be available here (see Using Insight's Indexer on page 153 for more information).

- 12) *Object Links*- The object link values are listed in the selected mapping file. To load the mapping file, click Load. The mapping file destination must be entered in the mapping file column or the object links will not load.
- 13) *Source Files*- The source files are records that are related to an image. They can be graphic (such as JPEG, TIF), sound (for example, Wav, MP3), or other multimedia files (such as Mov).

Click Load, navigate to the directories containing the source files. Select the source files that are listed in the selected mapping file. The object link list should contain the object link values for the source files you select.

NOTE: You are able to select one to many media items at a time. To select more than one media item, select the first item and hold down the Shift key, select the last media item in the group that you would like to bring into the Media Batch. Now, there should be numerous media items selected. Click open, this will bring the selected media into the Source Files field.

The Media Batches utility currently creates JPEG, SID and JPEG2000 image file formats. Original images can be .tif or .jpeg files. Luna suggests using the JPEG file format for resolutions up to 1536 (lengthwise). By default, the Insight profile will generate the standard set of derivative image sizes and formats commonly used for Insight installations. The Insight profile consists of 5 JPEG resolutions (spanning from 96 pixels lengthwise to 1536 pixels lengthwise) and a single multi-resolution encapsulated wavelet image file (either SID or JPEG2000).

- 14) *Match Objects & Media* - Compares the Object Link list from the selected mapping file with the selected Source files and inserts the matching pairs into the Processing List. Only media that matches will be linked. If a source file and object do not link, that source file will remain in the Source Files column.

NOTE: You are permitted to link source files and data by hand. To do this, select the object link and source file to be linked and click the >> button. The object link and source file will be added to the Process List. This link, and any media files that have not yet been processed, will be labeled as PENDING.

To remove or unlink source files and data (object link), click on them from the Process List and press <<. This will put the source files and object links back in their appropriate columns. They will be available to link again later.

- 15) *Process List*- The process list contains all media that will be and has been processed in a particular media batch.

After processing a media batch, a verification step is performed to check whether all media records were committed to the database correctly. If there is a discrepancy in the media record count, you will be alerted with a warning message.

Running Media Creation Process

Once the Process List is populated with linked Objects and Source Files, they will be categorized as PENDING in the Process list window. This means that the files have not been run but are ready to be. To run the media, click Start. A Media Creation window will come up and you can monitor the processing progress.

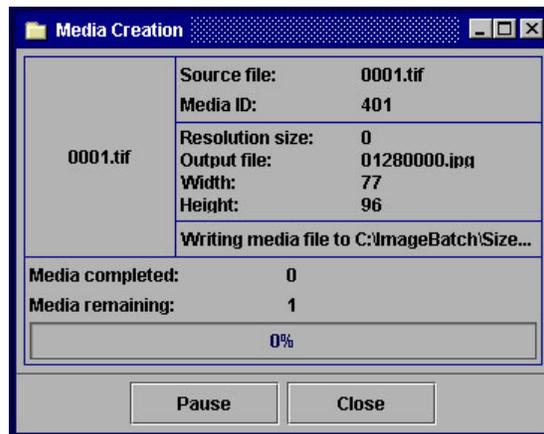


Figure 14 - Monitor Progress for Media Creation

When the media has been processed correctly, it will be labeled PROCESSED-SUCCESS in the Process List column.

If you browse to the destination location where processed media has been saved, you will find the Log File and processed media which has been formatted as defined in the Profile. A new LPS entry will be posted in the Collection, which can be seen by selecting the LPS Data node in the Administrator Tools main screen.

(For additional information on *LPS Data*, refer to LPS, SPS and Image Files on page 117 in this manual.)

Save the batch by pressing **Save** in the Media Batch window.

NOTE: If you stop the Media Batch, lose connection to your computer, or close the Administrator Tools, the Media Batch will stop where it is. If you open your saved Media Batch again and click start, it will pick up where it left off.

To verify that a Media Batch completed normally:

- 1) To view all saved or processed Media Batches, select the **Media Batches** node under Collection Editor. Double click on a Media Batch to edit it. Right-click on the completed Media Batch and select Tools from the pop up context menu. Which will pop up another menu. Select Map objects to media, which will open the Manage Objects-to-Media Mappings Window.

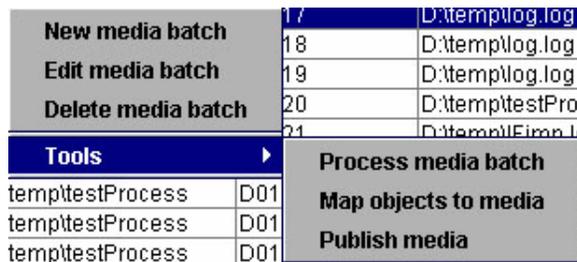


Figure 15 - Working with Media Batches

- 2) Verify links from the mapping file in the Manage Objects-to-Media Mappings window for the selected Media Batch. Only the Media Records processed in the selected Media Batch that have not yet been published will be available. You can link, unlink, and change links with this tool. (To learn more about the *Map objects to media function*, refer to Manage Objects-to-Media Mappings on page 133)

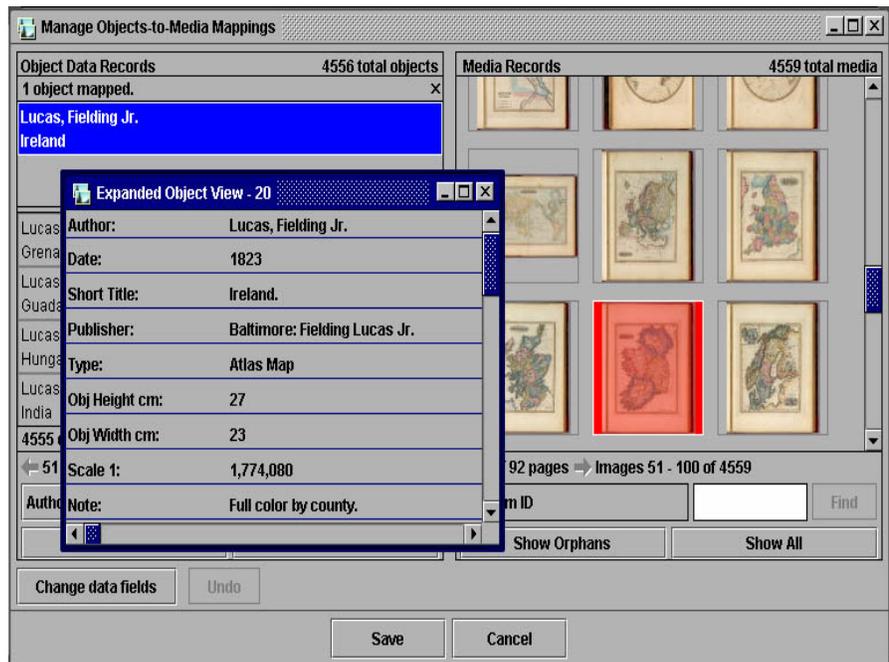


Figure 16 - Objects to Data Expanded View

- 3) *Publish media* – Use this option once the processed media group is correct and ready to be published into a Collection. To publish the processed material in a New Collection Group, fill in the new group name and then select Publish To New. However, before you publish the media, physically move the processed media from the original destination location to the location defined in the SPS. This will ensure that the proper media is available when it is published.

To publish the processed material into an existing group, select the desired group name and select Publish To Existing.

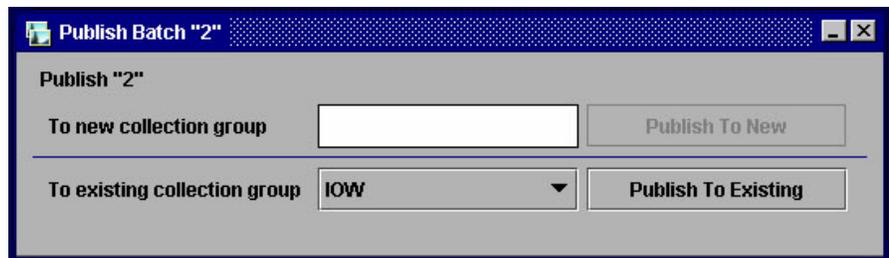


Figure 17 - Publishing Media Batches

- 4) Finally, update the thumbnail caches. For instructions on updating thumbnail caches, please see [Updating a Server's Thumbnail Caches](#) on page 155.

Once you have updated the Thumbnail Cache, your media should be available in your Insight Collection. Then, to review your log file, see [Reviewing and Modifying Mapped Media](#) on page 129.

Media Batch Tool options:

New media batch – If you select *New media batch*, a blank Media Batch window appears. You can design a media batch as described in the Processing a Media Batch section on page 120.

Edit media batch – Enables the media batch that you select to be available with all of its fields pre-assigned. You can now edit or change this media batch.

Delete media batch – Deletes the media batch from Insight Administrator Tools. You will receive a confirmation prompt to prevent you from accidentally deleting a Media Batch.

Tools – You will have the option to Process media batch, Map objects to media, and Publish media. For more information on Map objects to media or Publish media, see steps 2 and 3 above.

Process media batch – Enables you to process a Media Batch that is already created and saved. When this option is selected, the selected Media Batch window opens. Click start to process the media batch. You may choose to use the same set-up for every media batch, with only a unique LPS Directory, which will be automatically assigned. This way, you can process your media in the same fashion every time.

Reviewing and Modifying Mapped Media

After you have processed a Media Batch, Insight Administrator Tools creates a log file listing field values for your image files. The media creation log file includes the media type codes for easier identification of your image files. An example of a type code would be 01052000.jpg. The media creation log file can be found in the directory that you originally assigned while you were creating a new Media Batch (for additional information, refer to Processing a Media Batch on page 120).

Object ID	Media ID	Index	Media Type	LPS Code	File Name	Size	Another Size
ucsd2	9619	0	JPEG	0105	01050000.jpg	46	96
ucsd2	9619	1	JPEG	0105	01051000.jpg	92	192
ucsd2	9619	2	JPEG	0105	01052000.jpg	184	384
ucsd2	9619	3	JPEG	0105	01053000.jpg	368	768
ucsd2	9619	4	JPEG	0105	01054000.jpg	737	1536
ucsd2	9619	5	SID	0105	01055000.sid	1475	3072
ucsd3	9620	0	JPEG	0105	01050001.jpg	81	96
ucsd3	9620	1	JPEG	0105	01051001.jpg	162	192
ucsd3	9620	2	JPEG	0105	01052001.jpg	325	384
ucsd3	9620	3	JPEG	0105	01053001.jpg	651	768
ucsd3	9620	4	JPEG	0105	01054001.jpg	1302	1536
ucsd3	9620	5	SID	0105	01055001.sid	2605	3072

Figure 18 - Reviewing and Modifying Mapped Media

Creating an Image Profile

Image Profiles define the set of derivative sizes and file types that are generated for each source media file. Profiles may be reused on successive batches of source images.

- 1) Press *Configure* (on the *Media Batch* dialog) to open the *Image Creation Profile*. The Image Creation Profile enables you to create, view, edit, copy, and delete profiles. The default Insight Profile cannot be altered. This profile contains specific settings needed to process images for Insight using Luna naming conventions (discussed later in this chapter).
- 2) To create a new, blank profile by selecting *New*.
- 3) To change the existing profile, select *Copy*. This will bring up a copy of the active profile. In this view, you are able to give the profile a new name, assign a URL Prefix, a SID URL Prefix and change other items from the original profile such as Image Type settings and select *Preserve Filenames* or *Preserve Directory Structure*.
- 4) Check *Preserve Filenames* to preserve source file names (the tool will only apply an extension change).

If the user chooses *Preserve Filenames*, all derivatives (for all JPEG sizes and the Wavelet file) will have the same name.

If *Preserve Filename* is not selected, the media will be renamed by Luna naming conventions.

The Luna naming convention is a 12-character format (e.g., 00012001.JPG), made up of four parts:

- a. A Four-digit Batch ID# (ranging from 0000-9999). In the example 00012001.JPG, the batch is 0001.
- b. Single Digit Image Size Identifier. In the example 00012001.JPG, the Single Digit Image Size Identifier is 2. This is a size two image.
- c. A three-digit image sequence (ranging from 000-999). In the example 00012001.JPG, the three-digit image sequence number is 001. This is the first image in the batch 0001.
- d. A Three-Character File Format Extension. In the example 00012001.JPG, the three-character file format extension is .JPG. This is a JPEG image.

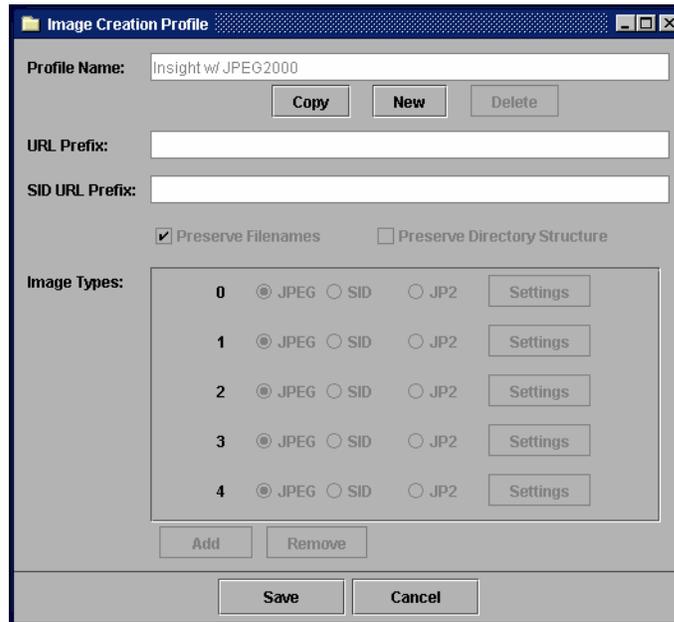


Figure 19 - Create Image Profile

Directory Structure Convention

- 1) If the *Preserve Directory Structure* checkbox is selected for the active image creation profile, a new select button will appear to the right of the LPS Directory setting. The LPS Directory setting is the field below Destination on the Media Batch console.

Click *Select* (to the right of LPS Directory), to open the LPS Directory Structures dialog, which contains two path statements: *Default Directory* and *End LPS At*. For the Default Directory, click Browse and navigate to the level where everything below will be preserved and replicated for each of the derivative image sizes being generated. For example, if your source directory path was

E:\Dalton\TIFFS\Wwm9912\Cas009\007149.tif

and you wanted to maintain the bi-directory structure below TIFFS; you would select the TIFFS directory to be the default directory. As a result, *Wwm9912/Cas009* will be the LPS and the Size0 directory path would be:

<http://luna01.dalton.org/jpegs/Size0/Wwm9912/Cas009/007149.jpg>

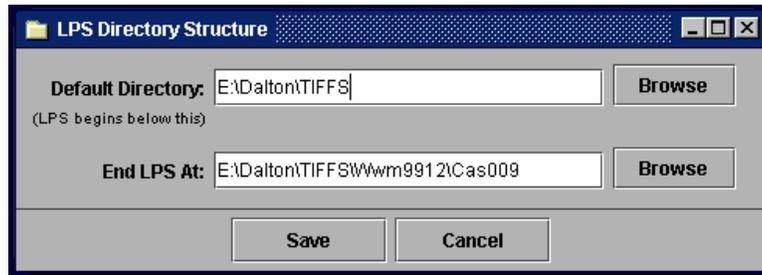


Figure 20 - LPS Directory Structure

If you choose not to select the Preserve Directory Structure, your batch process will process the images into the assigned LPS Directory listed in the Media Batch Console. Generally the LPS directory will follow a logical sequence after every batch processed, starting with D0001 and then going to D0002 and so forth. When you check the Preserve Directory structure option, this can be altered to your directory specifications.

- 2) In the Image Types section of the Image Creation Profile, you are able to determine the type of images that will be created (JPEG, SID or JPEG2000 images), Insight sizes, as well as other specific settings by selecting the Settings button to the right of a particular image type.

These are the options available for the Image Type, JPEG.

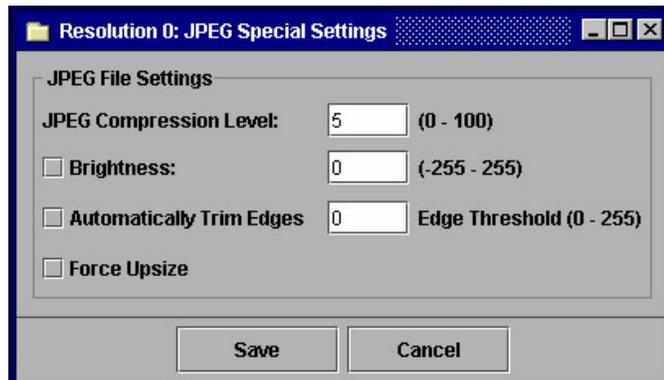
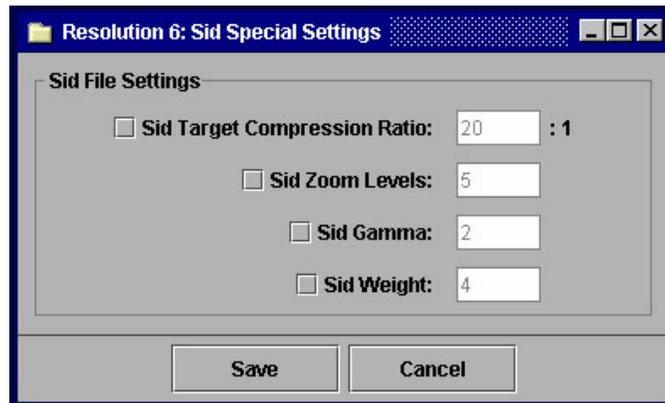


Figure 21 - JPEG Image Type

These are the options available for the Image Type, SID:

**Figure 22 - SID Image Type**

There is not an options set for Image Type, JPEG2000.

- 3) To add or remove Image Types, you will select either Add or Remove from the Image Creation Profile dialog to add or remove JPEG, SID and JPEG2000 images from Insight. The Image Creation Profile option enables you to customize your images (different sizes and resolutions) as well as to add or remove images from Insight.

Manage Objects-to-Media Mappings

The Manage Objects-to-Media Mappings tool provides you with an interface through which the relationship between published media files and descriptive records can be defined. The interface allows you to search through a Collection's media files and descriptive object records to create, modify, and delete the relations between object records and media files.

- 1) Expand the Collection Editor node, right-click the Map Objects-to-Media node and select *Run Directly*. This will open the Manage Objects-to-Media Mappings window.

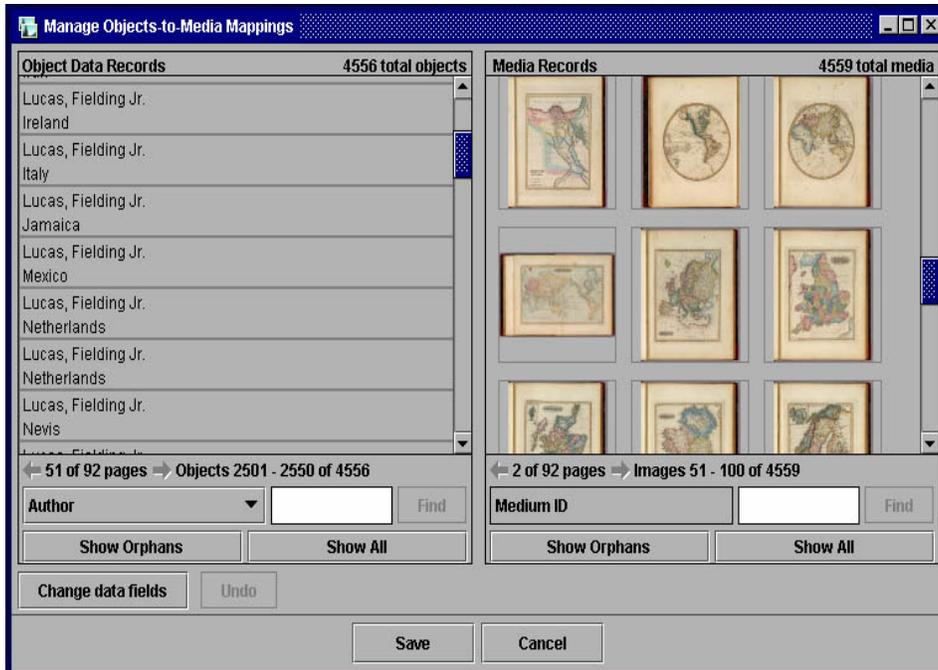


Figure 23 - Map Objects to Media

The Manage Objects-to-Media Mappings window is organized in an easy-to-use fashion. The left panel displays the Object Data Records for the Collection, the right panel displays the Media Records.

- 2) When you click on either an item in either panel, the selected item will be highlighted in red. This item is now active. Any items linked to it will be highlighted in blue in the opposite panel. If no blue items appear in the opposite panel, the selected item is an *Orphan*. An Orphan is a Media Record or Object Data Record without a link, and will not be available in Insight.

To map an object data record to a particular media file, select the media file. The selected record should now have a red highlight indicating it as the active element. Double-click any media file to determine the number of object records that are mapped to that media file. The list of mapped object records will appear in blue highlight.

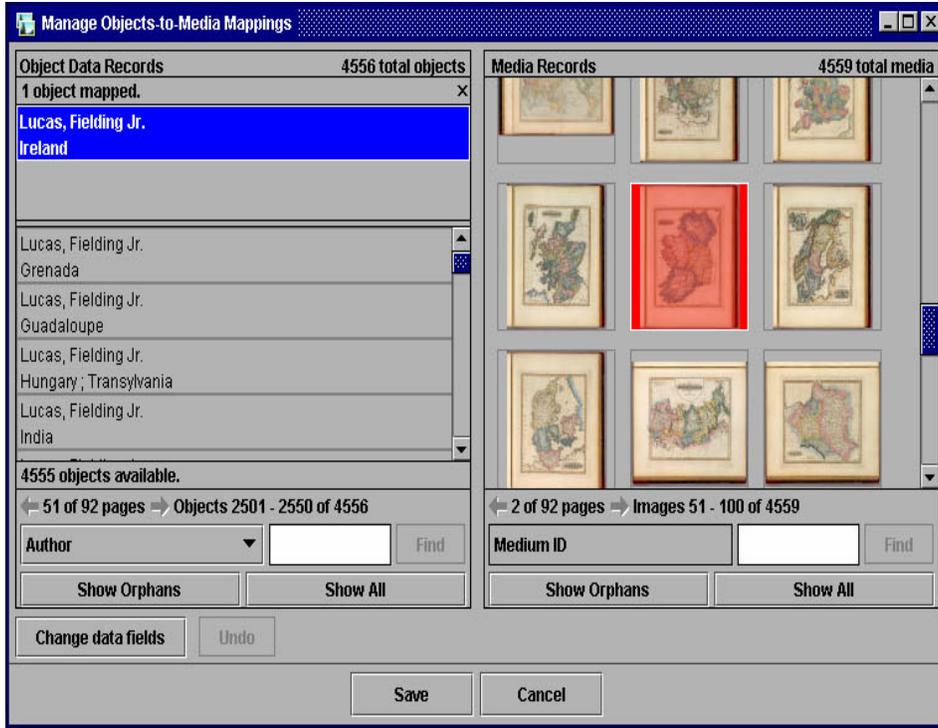


Figure 24 - Linking Object with Image

If the ID number for the selected media file is known (see 3) Processing a Media Batch on page 120), it may be useful to search for the associated object data record using the Find function. If the known information about the media file is from another field, use the Change data fields function to update the display and search fields to aid you in your search.

Click on any Media Record to link it to your Object Data Record. You will be prompted with a Mapping Confirmation window which states that you are about to map the selected object to the selected medium.

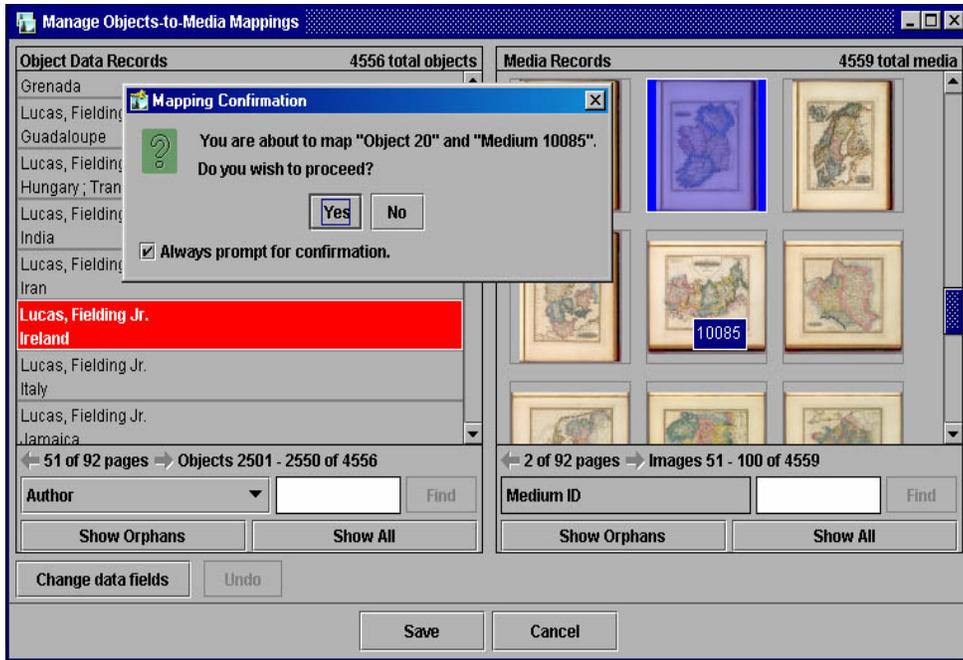


Figure 25 - Mapping Confirmation

- 4) Clicking a blue item will sever the mapping (a confirmation prompt will prevent you from doing this accidentally).
- 5) Object Records can be mapped to Media Records. Media Records can be mapped to Object records. Mappings can be severed from either side.
- 6) Press Undo to reverse the most recent mapping change. All mapping changes made during the session can be "Undone" until Save commits changes to the database. Once you have completed your mapping changes, press Save to apply the changes to the database.

Object Data Records

The Object Data Records pane, which is located on the left side of the Manage Objects-to-Media Mappings console, lists all the data for the selected Collection.

- 1) You can display up to two data fields for each record in this window. To view and change which two data fields are being displayed and in what order, click the *Change data fields* button, which is located in the bottom left corner of the dialog. This will allow you to choose which data fields you would like to display for the Object Data Records.
- 2) To view all data for a particular data record, right-click the record and select View all data.

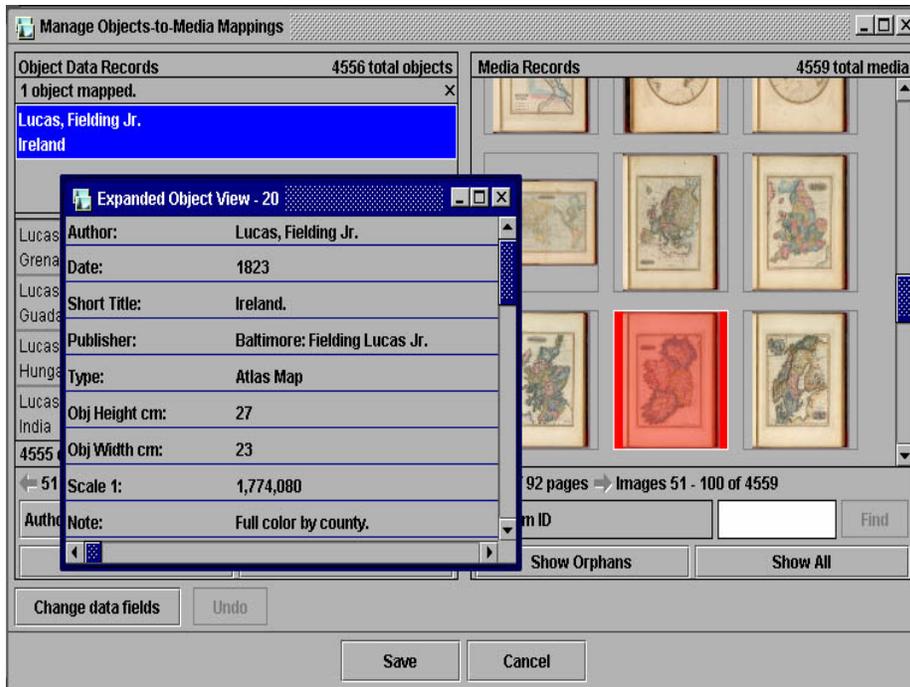


Figure 26 - Object Data Records Expanded View

- 3) To search for a particular image, type in any data associated with the active data field in the white text box. The data entered does not have to exactly match the item for which you are searching. All similar records will be displayed in the Object Data Records window when the search is complete. Once the data for the search is entered, click *Find*. The results will display in the Object Data Records window. Change the searchable data field by clicking the *Change data fields* button and selecting the desired field.
- 4) Roll your mouse over a particular data record, and hold it there for a second or so without clicking on it, the data identification number will appear. This can be useful for quickly identifying a particular data record without having to view all the data or performing a search.

If you would like to view all the Orphans (Data Records without a Media Record link), press Show Orphans. Only orphans will be available. To view all the data records, press Show All.

Media Records

The Media Records pane will display any available media in the Collection. When a media record is selected it will become highlight in red.

- 1) To see a larger view of a media record, right-click it. Select View Larger Image from the pop-up menu, and a larger image will open in its own viewing window. This function is useful when trying to view a detail of a particular image.



Figure 27 - Expanded Image View

- 2) To search for a media record, you must know that record's exact ID number. Enter the number in the white box in the right corner of the dialog and click Find. The result will display in the Media Records window. You can also find a particular image ID number by rolling your mouse over an image and holding it there for a second or so without clicking on it. The ID number for that image will appear. This can be useful for quickly identifying a particular Media Record without having to perform a search.

To see all orphans (media records unmapped to any object records), press Show Orphans. Only orphans will now be available. To view all media records, press Show All.

Working with Cataloging Templates

Notes on working with Cataloging Templates

When making changes to Cataloging Templates, it's best to ensure that other users are not importing data using Insight Studio or cataloging data in Inscribe. When you have completed your changes, run "update thumbnail caches" in the Insight Administrator Tools to update the Collection Manager's representation of the schema.

Modifying Cataloging Templates (changing field and field group properties)

After a Cataloging Template has been created and assigned to a Collection, it may no longer be manipulated in Insight Studio. The Insight Administrator Tools can be used to modify existing Cataloging Templates and Collections.

Understanding the Structure of a Cataloging Template

Insight Cataloging Templates contains four basic components:

- 1) Insight Settings: Includes field properties, search and display properties for Insight.
- 2) Inscribe Settings: validation settings, data grouping, and Inscribe display settings
- 3) Cross-Collection Searching Mappings: mappings between fields and the CDWA data Standard
- 4) Source Data and Write-back Mappings: mappings between Inscribe / Insight fields and source fields and tables in a traditional relational database.

For a Cataloging Template to work, you need settings for at least (1), (2), and (3) for each field. Cataloging Templates in Insight Studio simplify the creation of Collections and ensure proper configuration for Insight, Inscribe and BrowserInsight.

Modifying Specific Settings within a Cataloging Template

Once a collection is built, any modifications to be made to the Cataloging Template including data validation settings, Insight display settings, inscribe settings, adding a field, or removing a field must be completed within the Insight Administrator Tools.

Below is a list of each of the features and where in the Administrator Tools to make the appropriate changes.

Table 2: Field Properties in Insight Administrator Tools

JVA = Java Client BR = Browser	Fields	Standard Fields*	Record Fields	Field Groups	Record Relationships
General Properties					
Display Name	BR	JVA			
Display Properties					
Displayed in Data	JVA/BR				
Display field as Expandable String*	JVA				
Display Field as Non-Expandable Short String*	JVA				
Display field as Long String*	JVA				
Concatenate Repeating field values with a comma, semicolon, new-line or repeat field name	JVA/BR				
Specify field display order	BR	JVA			
Provide descriptive URL		JVA			
Field Grouping Properties					
Display just Field group name (not field name) **				JVA/BR	
Display just Field names (not field group name) **				JVA/BR	
Display both Field Groups Names and Field Names **				JVA/BR	
Search Properties					
searchable	BR	JVA			
keyword searchable	JVA/BR				
elevated search field	BR	JVA			
Change the select list properties for the field	BR	JVA			
Enable fuzzy-date searching		JVA			
Thumbnail & Sort fields					
Field can be chosen as a thumbnail field		JVA			
Field can be chosen as a sort field		JVA			
Inscribe / Data Validation settings					
Specify Field type (String, Number, Date)	X				
Field can repeat			X		
Field is required			X		
Field must contain a valid date (fuzzy date)			X		
Allow value lists			X		

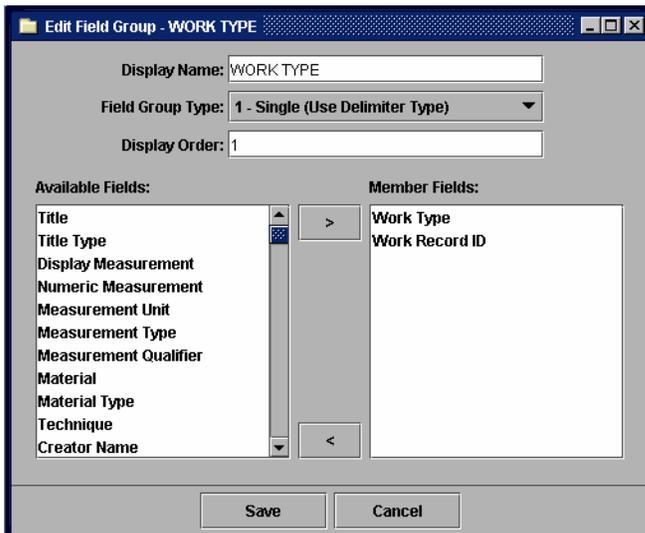
Tie field to Hierarchy	X				
Record Relationship properties					
Restrict the number of times a Record Type can repeat					X
<p><i>* Changes to the Standards Fields should be made for data standard associated with your Cataloging Template</i></p> <p><i>** For more information on the display properties of the Insight Data window please see Tuning the display of your Data in the Insight Data Window on page 147</i></p>					

! **WARNING:** Unlike Insight Studio, which has rigid controls to simplify and coordinate configuration of a Cataloging Template, the Insight Administrator Tools are designed to be extremely flexible, allowing major changes to be made to Insight components.

Adding a field from a Cataloging Template

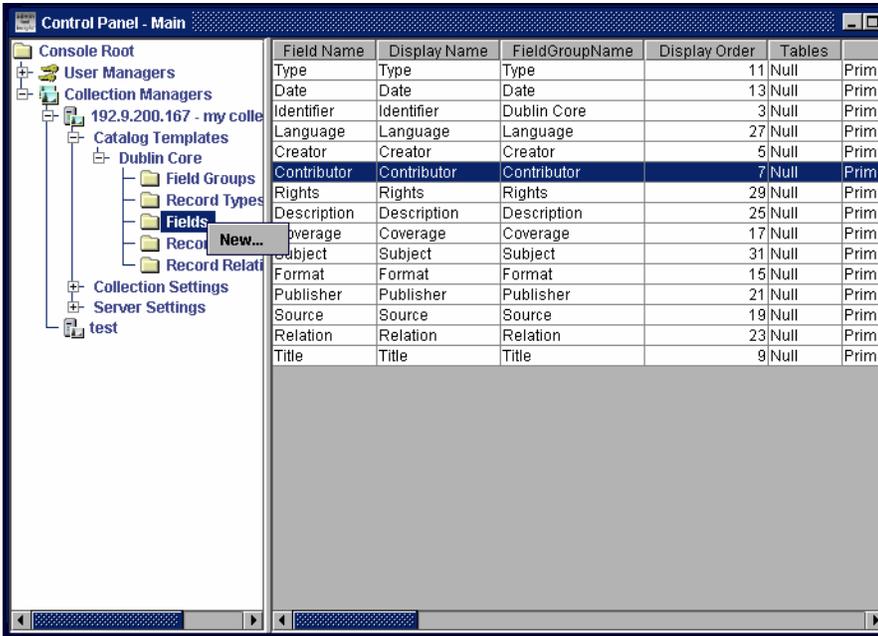
If you need to add a field to an existing Collection after that Collection has been published, follow the instructions below:

- 1) In Insight Administrator Tools, open the Cataloging Template for the Collection.
- 2) Unless you are adding the new Field to an existing Field Group, you will need to create a new Field Group.



- Right-click on the Field Groups node and choose New.
 - a. Specify a Display Name for the Group. Depending on the option you choose below for Field Group Type, see Choosing Field Group Display Settings on page 46 for an explanation of the options.
 - b. Choose a **Field Group Type**.

- c. Enter a Display Order.
- 3) Right-click Fields, add a new field.



Field Name:

Field Display Name:

Field Group Name:

Record Type Name:

Table Name:

Joined Tables:

Delimiter Type:

String Type:

Field Type:

Hierarchy Mode:

Hierarchy:

Grouping Table:

Grouping Field Name:

Preferred Field (Optional):

Display Order:

Select List (browser):

Keyword Searchable Search Pick Field (browser)

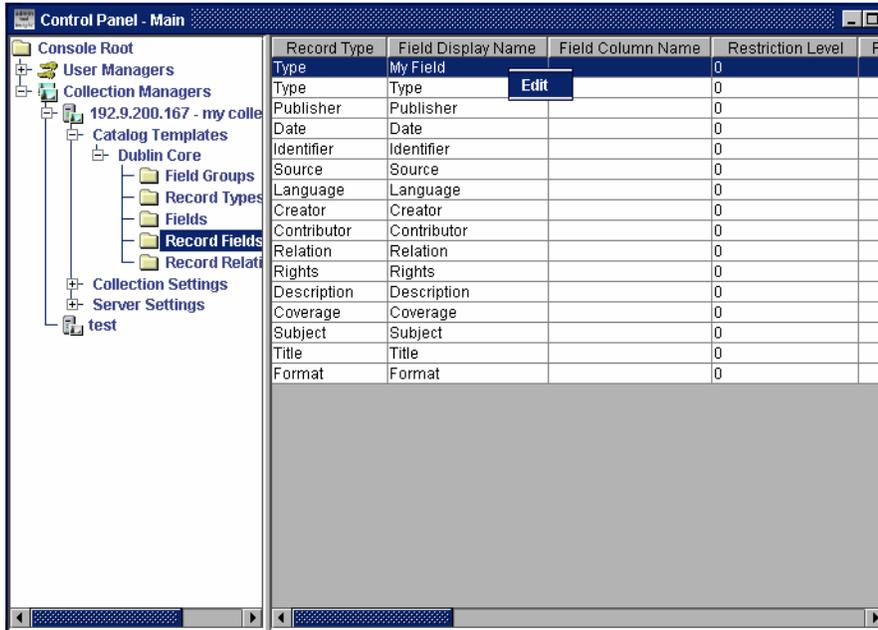
Displayed in Data Data Field Searchable (browser)

Fuzzy Date Field

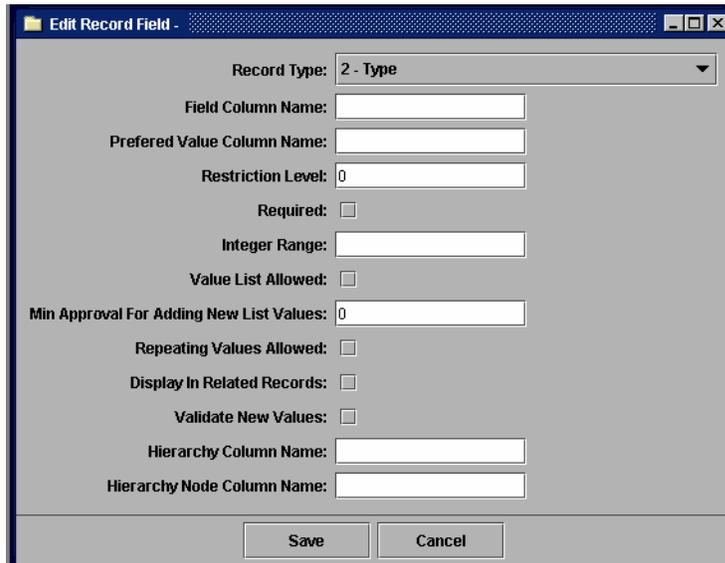
Save Cancel

- a. Specify a **Field Name** (if this field maps to an external data table, this should be the fieldname in the database).
- b. Choose the **Field Display Name** for the Browser.
- c. Specify the **Field Group** the field should be part of.

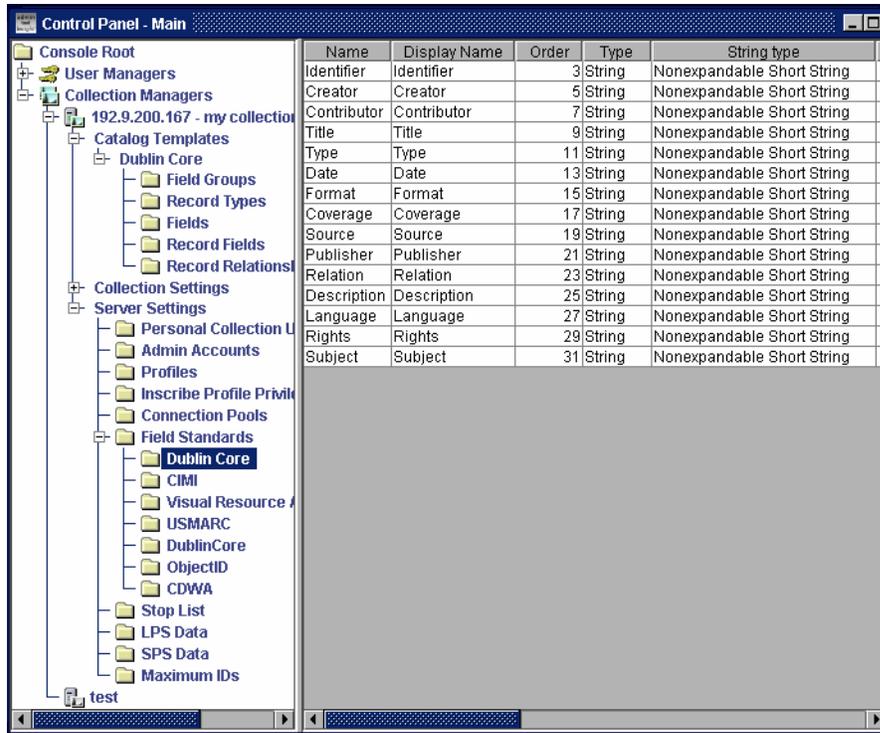
- d. Specify the **Record Type** the field should be part of.
 - e. Specify the other search and display characteristics you would like for the field.
 - f. Save your changes.
- 4) To set Data Validation properties, go to the **Record Fields** section and right click on the data field you just added and choose **"Edit."**



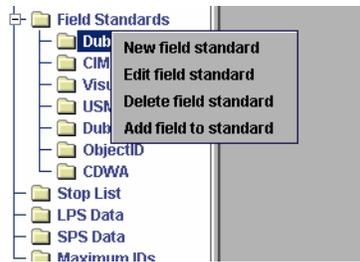
- a. Set any data validation rules or Inscribe display properties necessary for the field. This includes whether the field repeats, is required, etc.



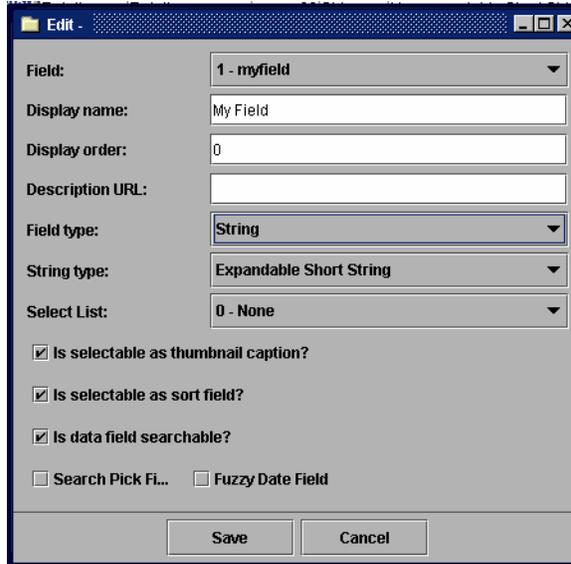
- 5) Add the field to the field standard:
- a. Open the Field Standards node for your Collection Manager.



- b. Right-click the local field standard for your Collection and choose Add field to standard.



- c. Specify Field settings for the Insight Java Client.



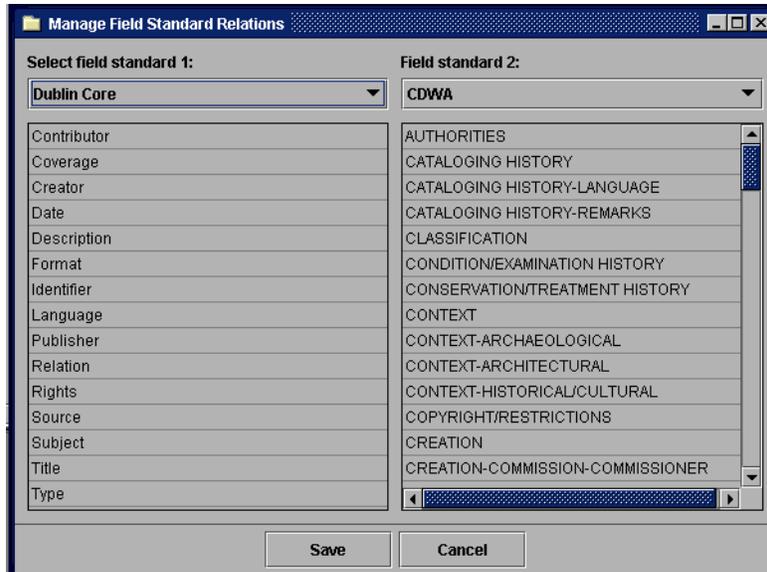
- i. Select the field you added above from the pull-down list.
- ii. Choose a display name for the field in the Insight Java Client.
- iii. Specify the other display properties.
- iv. Choose save.

6) Map the field for cross-Collection searching:

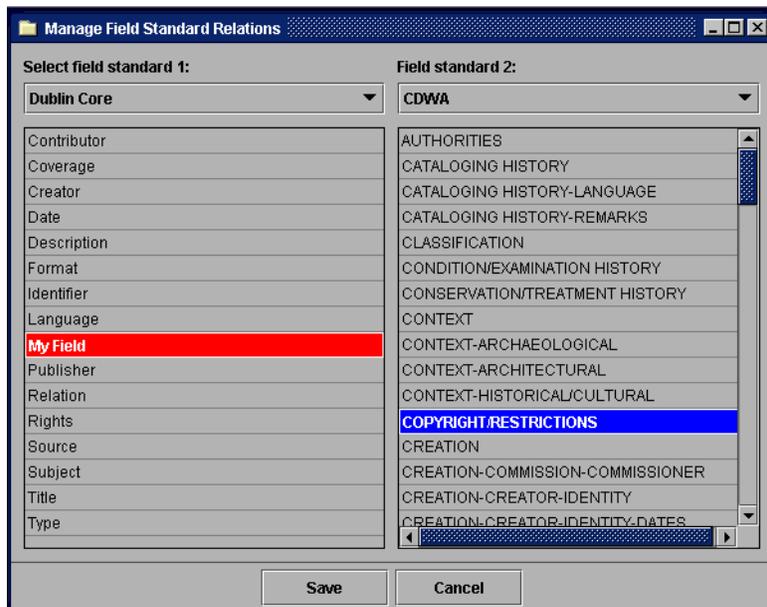
- a. Right-click the Field Standards node and choose Manage Field Standards.



- b. Choose the field standard for your Collection from the pull-down on the top left.



- c. Select the new field from the list on the left.



- d. Select the field(s) in CDWA you would like to map it to in CDWA.
- e. Press Save to store your new mappings.
- f. Run "Update Thumbnail Caches" or restart your Collection Manager or Personal Insight Manager to finalize the changes. For instructions on updating thumbnail caches, please see Updating a Server's Thumbnail Caches on page 155.

Removing a field from a Cataloging Template

Though it is possible to remove a field from a Cataloging Template, it is strongly recommended that you do not. Removing a field **REMOVES ALL DATA** associated with that field. You **CAN NOT GET THAT DATA BACK**.



Moving a field between Record Types

As Record Types are structural elements in your data, it is strongly suggested you do not move a field between Record Types. Moving a field between Record Types is essentially adding and removing that field, it will **REMOVE ALL DATA** associated with that field. You **CAN NOT GET THAT DATA BACK**.

Moving a field between Field Groups

As field groups are purely display elements for the data window of the Java Client or BrowserInsight, you can easily move fields between field groups.

To move a field between field groups, you have two options for making the change in the Insight Administrator Tools:

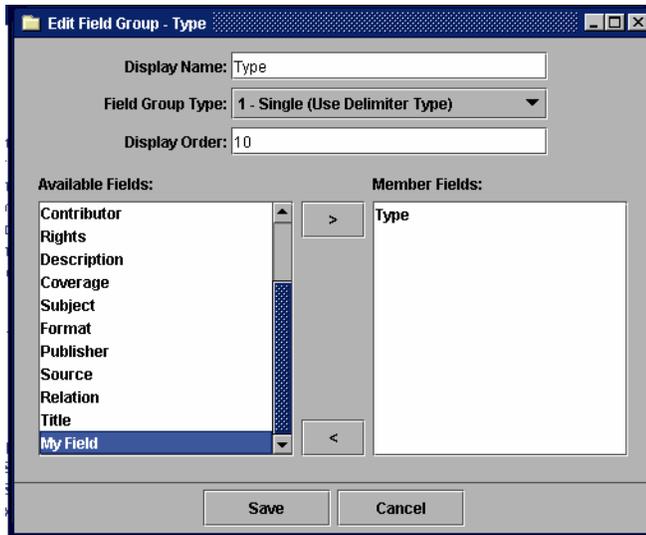
- 1) Open the entry for the field in the "Fields" section, and assign it to another field group.

 A screenshot of a software dialog box titled "Edit Field - myfield". The dialog has a standard Windows-style title bar with minimize, maximize, and close buttons. The main area is divided into two columns. The left column contains labels for various field properties, and the right column contains the corresponding values or controls.

Field Name:	myfield
Field Display Name:	My Field
Field Group Name:	Type
Table Name:	
Joined Tables:	Resides in Primary Objects Table
Delimiter Type:	Multi-field Name
String Type:	Expandable Short String
Field Type:	Unsearchable
Hierarchy Mode:	None
Hierarchy:	None
Grouping Table	None
Grouping Field Name	
Preferred Field (Optional)	
Display Order	0
Select List (browser)	0 - None
<input type="checkbox"/> Keyword Searchable	<input type="checkbox"/> Search Pick Field (browser)
<input type="checkbox"/> Displayed in Data	<input type="checkbox"/> Data Field Searchable (browser)
<input type="checkbox"/> Fuzzy Date Field	

 At the bottom of the dialog, there are two buttons: "Save" and "Cancel".

- 2) Open the entry for the Field Group you wish to add the field to in the "Field Groups" section and assign the field to that field group.



Tuning the display of your Data in the Insight Data Window

Both Fields and Field Groups have basic properties which govern their display. These include whether field names are displayed, how the data should be displayed in the data window, whether field group names should be displayed, and how repeating values should be handled. Between these properties, data can be displayed quite differently within the data window.

Choosing between the Three Display Types for Data Fields

There are three different display types for data within Insight. These settings are assigned on a per-field basis, allowing you to set different values depending on the type of text in the field.

Non-expandable Short String: A non-expandable short string indents all of the text and wraps it at that indent for each line that follows. (see example below)

Expandable Short String: An expandable short string is similar to the non-expandable, with the exception that after the first line the text is concatenated and end-users can expand the text to see the rest of the value. (see example below)

Long String: A long string does not indent the text after the first line, but instead wraps to the width of the data window. (see example below)

Choosing a Display Type for Field Groups

There are four different display types for field groups within Insight. These settings are assigned on a per-field group basis, allowing you to mix and match settings as needed.

Type 1: Fields are ungrouped – fields are separated by a horizontal line from each other, fieldnames are displayed but the field group name is not.

Type 2: Fields are grouped – field groups are separated by a horizontal line from each other, fieldnames are displayed but the field group name is not.

Type 3: Fields are grouped – field groups are separated by a horizontal line from each other, the field group name is displayed but the fieldnames are not.

Type 4: Fields are grouped – field groups are separated by a horizontal line from each other, both the field group name and the fieldnames are displayed.

Display Field Group Names

Displays the Field Group Name, followed by the individual Field values (without Field Names), one Field per line.

```
Example: Artist Info:
         Pablo Picasso
         1954
         Spanish
```

Display Group & Field Names

Displays the Field Group Name, followed by the individual Named Fields, one Field per line.

```
Example: Artist Info:
         Artist:           Pablo Picasso
         Artist Date:      1954
         Artist Nationality: Spanish
```

Display Field Names

Displays each individual Field Name and groups the Fields together.

```
Example: Artist:           Pablo Picasso
         Artist Date:      1954
         Artist Nationality Spanish
```

Single – Use Delimiter

Used for a single Field that may have multiple repeating values.

NOTE: If more than one Field is selected, the delimiter cannot be used. Insight can only use the delimiter type you defined in the Field.

```
Example: Artist: Pablo Picasso; Georges Braque
```

Cataloging Templates and External Databases

A custom Cataloging Template is required if Insight's internal tables are to be coordinated with a traditional database structure. There are two main reasons for creating a custom Cataloging Template:

- 1) The template will maintain mappings back to real fields and tables (and Inscribe will attempt to write to these).
- 2) Cataloging Templates which support the Insight Indexer often maintain a different structure than other Cataloging Templates.

NOTE: If you have licensed the ability to create multiple collections, it is **STRONGLY** suggested that you install a special Collection Manager just for the collection you will use with this source data.

Creating a Cataloging Template that Supports the Insight Indexer (but does not write-back to the existing source tables)

Cataloging Templates that support indexing content from an existing database, but don't need to write-back changes (i.e. from inscribe) rely on the existing database & table structure to maintain the structure of the data.

To create a template:

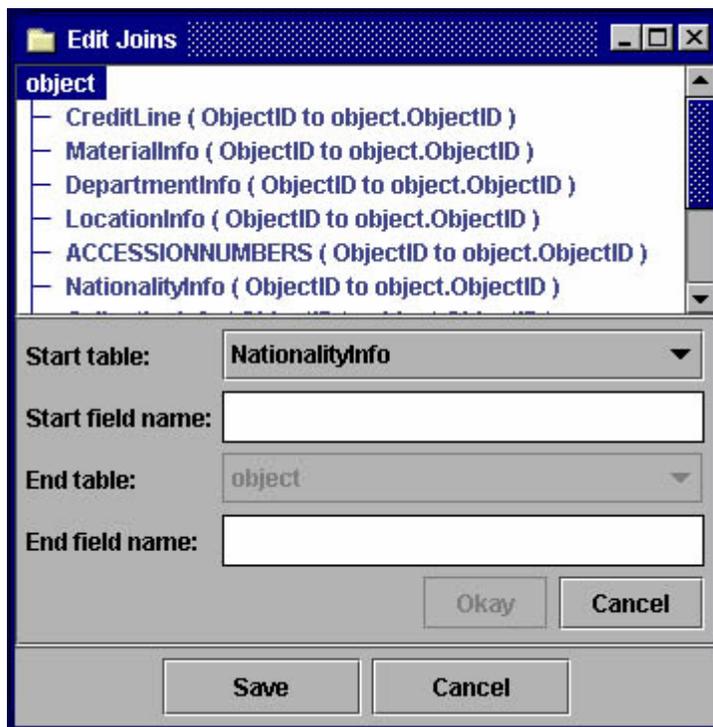
- 1) Create an object-level field group in Insight Studio.
- 2) Create a field for each field which you wish to import (regardless of what table it comes from).
- 3) Customize the field settings as needed including, cross-collection searching settings, search & display settings, and field type.
- 4) Publish the template and complete your collection.
- 5) Open the Insight Administrator Tools and connect to the collection you just created.
- 6) Define tables for each of the data tables you will be importing from.
- 7) Map each of the fields to the appropriate table.
 - a. For each field, you will need to assign the table from which it originates
- 8) Designate a Grouping Table and Grouping Field Name

NOTE: Grouping Table and Grouping Field Name maintain the row position of grouped values. For example: If we consider a table defining people we may have a Name, Date and nationality. The Table that contains this information also has a numeric row identifier. This Row identifier is what we are referring to. This way Insight knows to display the values together.

- 9) Map all of the joins between the tables. Joins define how data is related from one table to another based on the join field name. Edit Joins only applies to a collection that has more than one table. For collections that use a single table, this portion can be ignored. Follow the steps below to create a Join:
 - a. Right click Edit Joins in the navigation tree.



- b. In the Edit Joins dialog panel, right click Add Join on a table name. You can only edit a join if there are tables already joined together.



- c. Select a Start table name from the drop down list and enter the Start field name of the selected table.
- d. Select the End table name in the drop down list. This is the final table that completes the join function.
- e. Enter the Start and End table field names which link the two tables together.
- f. Click Save to update your joins.

NOTE: Insight is capable of gathering data from many complex data sources. If you need more assistance in connecting insight to an existing data source, please contact our technical support department. support@luna-img.com.

Creating a Cataloging Template that Supports the Insight Indexer and supports write-back to the existing source tables

Cataloging Templates that support indexing content from an existing database, but require the functionality of writing those changes (i.e. from Inscribe or Insight Studio's data import module) back to the external source tables, must represent the structure of the data both in the source table structure as well as within Inscribe.

To create a Cataloging Template that supports write-back to the existing source tables:

- 1) Create an object-level field group in Insight Studio.
- 2) Create a field group for each table represented in your source-tables.
- 3) Create a field for each field which you wish to import. Specify the display name for the field (the actual database field name will be specified within the Administrator Tools). Customize the Insight, Inscribe, Cross-Collection Searching and other settings.
- 4) Add the field to the appropriate Field Group.
- 5) Specify the field group settings.
- 6) Publish the template and complete your collection.
- 7) Open the Insight Administrator Tools and connect to the collection you just created.
- 8) Map each of the fields to the appropriate table.
- 9) Map all of the joins.
 - a. Right-click the Joins folder of the Insight Administrator Tools to access the Manage record Joins panel.

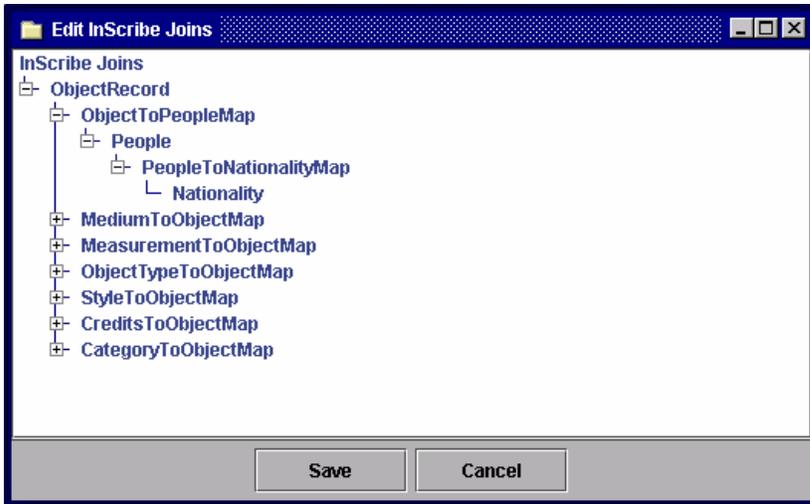
Joins define the relationships between Record Types through intermediate mapping tables. Creating Join definitions for Inscribe is similar to the method used in the Manage Field Joins, except now you can have multiple root nodes.

The example below shows each of the Record Type tables are mapped through an intermediate mapping table that supports the many-to-many relationship that exists between the two record types.

In the case of the Object Records relation to People (Artist record type), the relationships between the two independent record types are defined in the ObjectToPeopleMap table.

The intermediate mapping tables are two column tables containing the primary keys from each of the related record types. In this case, the ObjectToPeopleMap table contains ObjectID and PeopleID.

When defining an Inscribe Join, start from the preferred record type and work outwards to the related record type. These definitions are key in the initial indexing and update source relational data processes used by Inscribe to manage data integrity.

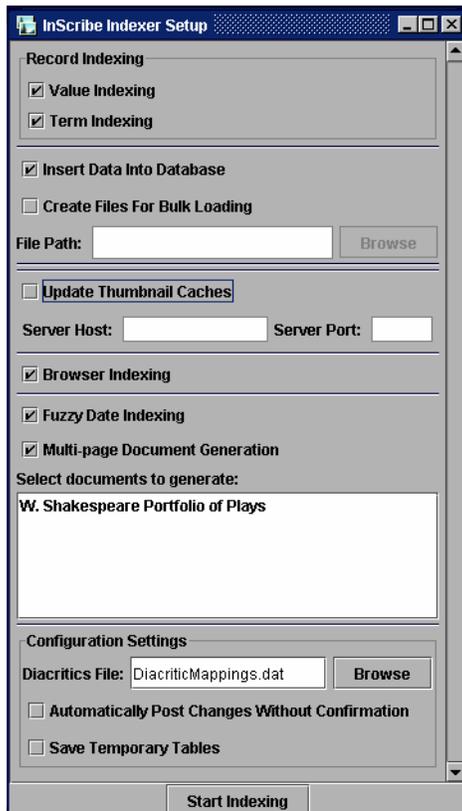


NOTE: Insight is capable of gathering data from many complex data sources. If you need more assistance in connecting insight to an existing data source, please contact our technical support department. support@luna-img.com

Using Insight's Indexer

Insight's Indexer is used for the following purposes:

- a) to create multi-page documents from document Templates
- b) to manually regenerate fuzzy date indexes
- c) to update thumbnail caches (soft restart)
- d) to import data from external data tables



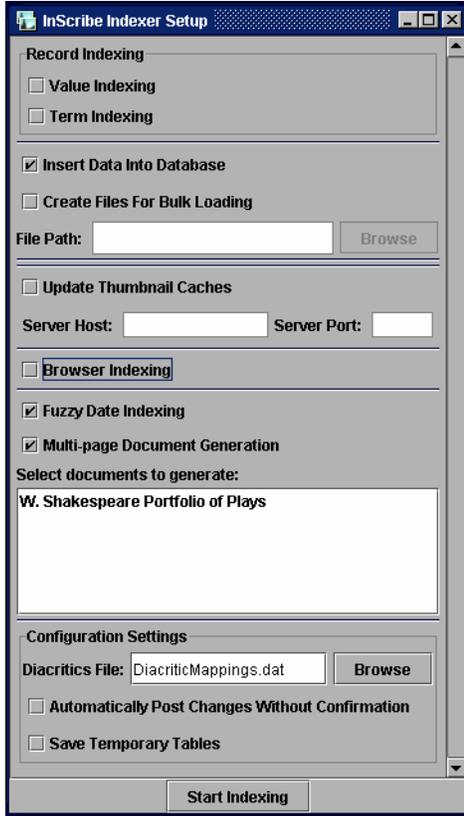
Running the indexer for Fuzzy Date or Multi-page Document Indexing

If you are just running fuzzy date or Multi-Page Document indexing:

- 1) Right-click the Invoke Indexer node for your Collection (under Collection Settings | Collection Editor) and choose run.

NOTE: Not all users have rights to access the Collection Editor node in the Insight Administrator Tools. You will not see this option if you do not have the appropriate rights.

- 2) Make sure **Value Indexing**, **Term Indexing** and **Browser Indexing** are **NOT** selected.



- 3) Select Fuzzy Date Indexing and / or Multi-Page Document Indexing as needed.
- 4) Press Start Indexing
- 5) A progress panel will report indexing status in real time. Upon completion, press Close.



Updating a Server's Thumbnail Caches

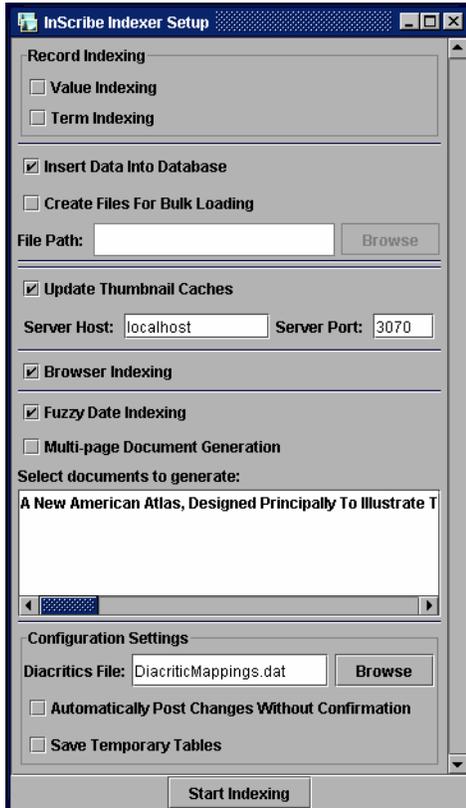
The Insight Collection Server can be "soft restarted" i.e. told to refresh all of it's configurations from the database via special type of Indexing.

To tell a collection server to update thumbnail caches:

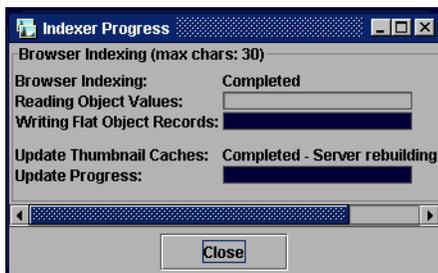
- 1) Right-click the Invoke Indexer node for your Collection (under Collection Settings | Collection Editor) and choose run.

NOTE: Not all users have rights to access the Collection Editor node in the Insight Administrator Tools. You will not see this option if you do not have the appropriate rights.

- 2) Make sure **Value Indexing**, **Term Indexing** and **Browser Indexing** are **NOT** selected.



- 3) Select Update Thumbnail Caches and specify the Hostname and Port your collection manager is using.
- 4) Press Start Indexing.
- 5) A progress panel will report indexing status in real time. Upon completion, press Close.



Running the indexer to import data from external data tables

If you are using Insight to publish a view of external source data tables, the indexer will need to run each time those data tables change (in order to import the changes into Insight).

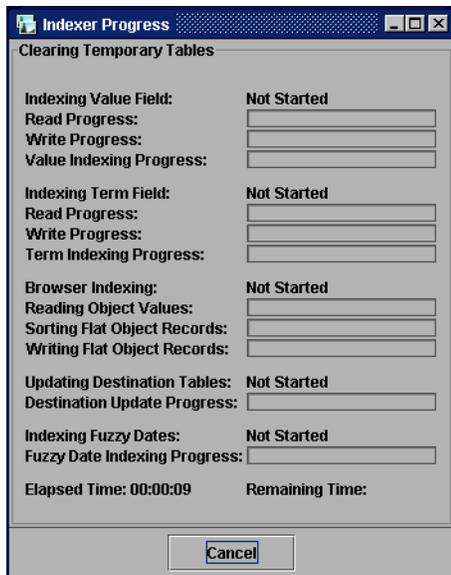
NOTE: It is best to run the indexer at off hours as running it will consume both processor and memory.

To run the Indexer:

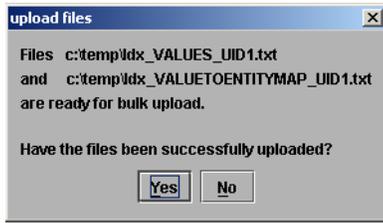
- 1) Right-click Invoke Indexer under Collection Settings | Collection Editor for your Collection, and choose **run**.

NOTE: not all users have rights to access the Collection Editor node of the Insight Administrator Tools. You will not see this option if you do not have the appropriate rights.

- 2) Make sure **Value Indexing**, **Term Indexing**, and **Browser Indexing** are all selected. You may also choose fuzzy date indexing, and Multi-page document indexing, if applicable.
- 3) Choose a data loading method. The Indexer uses SQL transactions to post to the database. For complex databases, these transactions can be very time consuming. You can speed up the process on Oracle or Microsoft SQL Server by having the indexer create a set of temporary files which are bulk-loaded into the database during the indexing process. This method is suggested for databases with over 20,000 records, and will significantly increase the speed of the indexing process.
- 4) Press Start Indexing.
- 5) A progress panel will report indexing status in real time.



- 6) If you chose to create bulk load files, the indexer will prompt you when it's ready for you to load the files into the database:



Oracle

Once you are prompted, go to the directory that you specified for these files. You will notice some new files followed by .cmd, .ctl, .txt. You will need to make sure that your environment is set up for the load. Ensure you are using the same character set for the load that your database is using i.e. NLS_LANG=American_America.WE8ISO8859P1

The *.cmd file is an executable file that will run the oracle sqldr utility. You will need to edit this file to enter the correct user and password for your schema.

The *.ctl files are the oracle control files used for the bulk load.

The *.txt files contain the data to be loaded.

Execute the appropriate .cmd file. Once the operation completes, return to Insight Administrator Tools and continue the indexing process. If you are prompted again, repeat this action for the second set of data.

MSSQL

Using SQL Server Enterprise Manager, perform the following for each table referenced in the prompt:

- 1) In Enterprise Manger, right-click on the Tables node for the database you are working on. Go to All Tasks and select Import Data.
- 2) Follow the wizard through the next steps:
 - a. Click Next past the first screen
 - b. In data source, choose text file. Navigate to the `idx_values.txt` file and press Next.
 - c. In the Select File Format window, change the row delimiter to `{1|#}` and select First row has column names. Press Next
 - d. On Specify Column Delimiter, make sure Tab is selected and press Next.
 - e. Choose Destination database and press Next.
 - f. On Select Source Tables and Views, change the destination table to be the ITValues table. Press Next

Verify this by clicking on the transform button. You should see Append rows to destination table is selected and create destination table is Not selected

- g. On the next wizard panel, you can save this function as a DTS package for future use. Press Next.

- h. Confirm the process and Press Finish.

Repeat these steps for each requested load. When selecting the destination table, replace `idx_` with `IT`. For example: `idx_values = ITValues`.

Once you have finished the Bulk Load, return to the Indexer and continue the process.

Trouble Shooting the Indexer

When attempting to run the Indexer, there may be errors that can cause the Indexer to fail. This section will describe some of the common errors and will also provide solutions to those errors.

An error you may encounter could cause the indexer to stop in the middle of indexing. In this case, you need to go into the *Edit Collection Manager* dialog window and turn on (check) the *Log Batch Commands* check box and then rerun the Indexer.

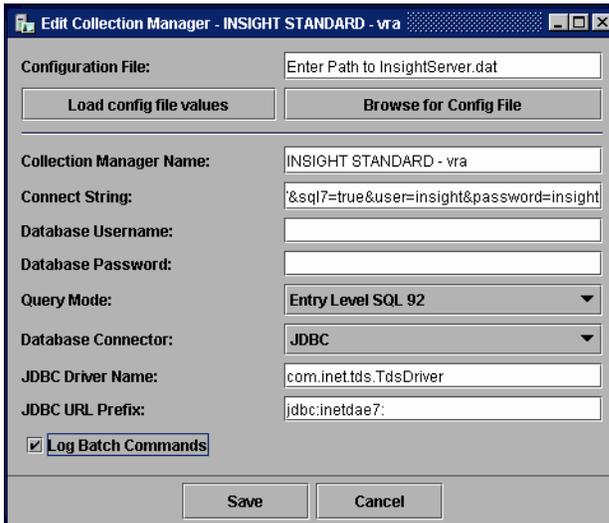


Figure 28 - Enabling Log Batch Commands

When the *Log Batch Commands* is enabled, Admin Tools begins to log queries to the `databaseconnector.txt` file. You can find this file in the `InsightAdministration` folder. You can navigate to that folder in your directory and view the `databaseconnector.txt` file.

Another common error is not having the *Primary Object Table* and *Primary Object Key* defined in the *Tables* Folder.

- 1) When establishing which table(s) the indexed fields will originate from, the main table must be defined. Then, the indexer will know where to relate the indexed data and on what field to base the relationship.

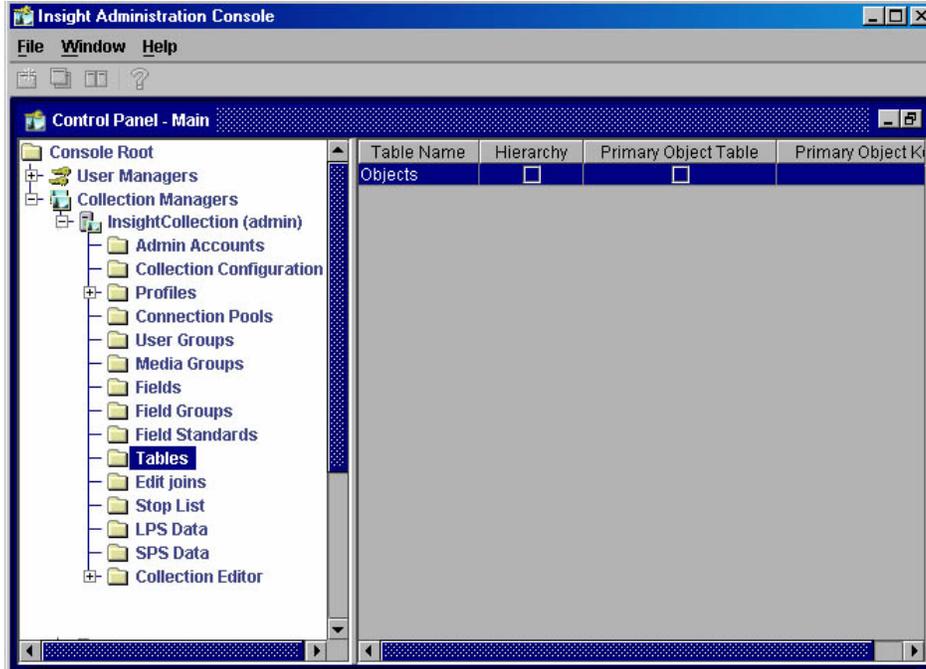


Figure 29 - Table Where Indexed Fields Originate

For example, if Objects is the only table in a flat database structure, it will be considered the main data table from where the data is derived. Therefore, the Primary Objects Table field must be selected and the Primary Object Key must be set to the field that is chosen to uniquely identify each record. However, if the database is in a relational structure, then the table that is considered to be the main table must be selected as the Primary Object Table, and the Primary Object Key must be the field that is used to relate to these tables.

- 2) A typical problem that is often encountered is not having the fields in the Grouping Table and Grouping Field Name populated in the Fields table. The Grouping Table tells the indexer which table the row information is being drawn from, and the Group Field Name specifies which field is being used to uniquely identify that row of information.



Figure 30 –Identifying Group Field Name

For example, if the *Field Name* is Author and the data is being grouped from the *Objects* table (the main table in a flat database structure), then the *Grouping Table* would be populated with the table name *Objects*, and the *Grouping Field Name* would be populated with the field name *ObjectID*, because it is the unique value that is being used to identify each row of information in the *Objects* table.

However, if this was a relational database and the information was coming from two tables, this would be different. The *Grouping Table* name would be the name of the table in which the row information would be coming from, and the *Grouping Field Name* would come from the unique identifier that identifies that row of information.

For example, you have an Artist table and a Nationality table. The Artist table contains all of the data that describes the Artist and the Nationality table contains the various types of nationalities that relate to Artists. So, the Artists would be the *Grouping Table*, because Artist information is what we are looking for; and ArtistID would be the *Grouping Field Name*, because this is what relates the artist to a nationality.

To transfer indexed data from the IT Tables to the DT Tables manually:

On occasion, the Insight Indexer will fail when it attempts to transfer the data from the IT(Insight Temporary) to the DT (Destination Tables) tables. This failure is generally caused by a database timeout. Below we have provided the queries used to transfer this data to run manually.



WARNING: To complete the indexing process you will first need to identify your UniqueCollectionID. You will find this in your DatabaseConnector.txt file located in the Insight Administrator tools root directory. Starting from the end of the file, Search for “UniqueCollectionID”. Once Located, populate the following script with the appropriate value. Next you will need to execute each line of the script separately. Once you have completed this the live data should be ready to use once you restart your collection manager or run an update thumbnail cache. If you have any questions please contact the Luna Imaging support department support@luna-img.com.

- 1) Open a database script editor and connect to your **Collection Manager** database.

Microsoft SQL

- SQL Query Analyzer or isql

Oracle

- SQLPlus or SQLPlus Worksheet

MySQL

- MySQL Query Browser

- 2) Run the following SQL Script, replacing <UCID> with your Unique Collection CID.

```
DELETE FROM DTTERMTOENTITYMAP WHERE UniqueCollectionID = <UCID>
DELETE FROM DTTERMTOOBJECTMAP WHERE UniqueCollectionID = <UCID>
DELETE FROM DTTERMS WHERE TermID NOT IN (SELECT TermID FROM
DTTERMTOOBJECTMAP)
DELETE FROM DTVALUETOENTITYMAP WHERE UniqueCollectionID = <UCID>
DELETE FROM DTVALUETOOBJECT WHERE UniqueCollectionID = <UCID>
DELETE FROM DTVALUES WHERE UniqueCollectionID = <UCID>
DELETE FROM DTENTITYTOENTITYMAP WHERE UniqueCollectionID = <UCID>
DELETE FROM ISCOLLECTIONENTITYMAP WHERE UniqueCollectionID = <UCID>
DELETE FROM IDTEMPOLD
DELETE FROM IDTEMPNEW
INSERT INTO DTTERMTOENTITYMAP SELECT Distinct * FROM
ITTERMTOENTITYMAP
INSERT INTO DTTERMTOOBJECTMAP SELECT Distinct * FROM ITTERMTOOBJECTMAP
INSERT INTO DTTERMS SELECT * FROM ITTERMS
INSERT INTO DTVALUETOENTITYMAP SELECT Distinct * FROM
ITVALUETOENTITYMAP
INSERT INTO DTVALUETOOBJECT SELECT Distinct * FROM ITVALUETOOBJECT
INSERT INTO DTVALUES SELECT * FROM ITVALUES
INSERT INTO DTENTITYTOENTITYMAP SELECT Distinct * FROM
ITENTITYTOENTITYMAP
INSERT INTO ISCOLLECTIONENTITYMAP (UniqueCollectionID, EntityTypeID,
EntityID) SELECT Distinct UniqueCollectionID, EntityTypeID, EntityID
FROM DTVALUETOENTITYMAP WHERE UniqueCollectionID = <UCID>
```

Other Insight Features

Creating Multi-Page Documents

Some complex objects are best represented as a series of linked objects and images. A book or similar document may be made up of pages, each page may be a separate object in the collection. The Multi-Page Document Tool enables Insight Administrators to create objects within Insight which contain multiple data records and images. More specifically, the Multi-Page Document tool leverages the existing metadata which defines the structure of the document into a visual representation.

You can create multi-page documents in two ways:

- Use the Multi-Page Template (to create multiple multi-page documents at one time)
- Use the Multi-Page Document Creation dialog (to create a single multi-page document).

NOTE: There are specific requirements to the structure of the Multi-Page Document. Each hierarchical section must be managed by a **numeric** field (to properly support grouping and sorting).

Sample Data for a Multi-Page Document

The example below shows the logic of how the following documents are to be compiled to create multiple multi-page documents in Insight. This example will be referenced throughout the following section.

Object ID	Title	Level1 (chapter)	Level2 (Section)	Level3 (Page)
0001	Book A	1	1	1
0002	Book A	1	1	2
0003	Book A	1	2	3
...				
0040	Book B	1	2	1
0041	Book B	2	1	2
...				
0060	Book C	1	1	2
0070	Book C	6	1	25

...				
-----	--	--	--	--

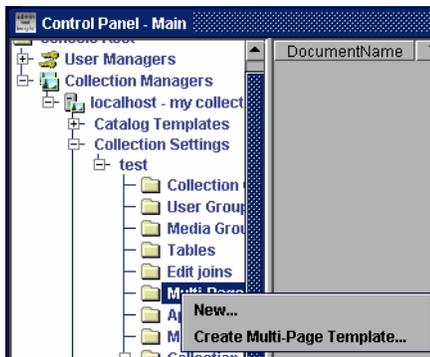
From the sample data above, three multi-page documents will be created: Book A, Book B, and Book C. The books will be organized as follows:

- Book A:
 - Chapter 1, Section 1, page 1, (Object ID) 0001
 - Chapter 1, Section 1, page 2, (Object ID) 0002
 - Chapter 1, Section 1, page 3, (Object ID) 0003
- Book B:
 - Chapter 1, Section 1, page 1, (Object ID) 0040
 - Chapter 2, Section 1, page 2, (Object ID) 0041
- Book C:
 - Chapter 1, Section 1, page 2, (Object ID) 0060
 - Chapter 6, Section 1, page 25, (Object ID) 0070

Creating Multiple Multi-Page Documents Using Multi-Page Templates

To create a set of Multi-Page Documents in a Collection using a Multi-Page Template:

- 1) Open the Insight Administrator Tools and connect to the Collection.



- 2) Open the Collection Settings node.
- 3) Right-click Multi-Page Document and select Create Multi-Page Template.

Multi-Page Documents have a hierarchical structure, and each level field, such as Title, Level, or Page Order is unique. There is a maximum of seven levels. At least one level of definition is required in using the Multi-Page document Template (definition should start from Level 1, then Level 2, etc.)

The highest level, the Document ID Field, is the object itself (book, manuscript, and so forth). The lowest level is a page in a book. The page has to be defined in numeric terms (1, 2, 5, 8) and not in text or roman numerals (one, five, iv, iii) format. You can specify a minimum number of pages to generate a multi-page document from an entire book or manuscript. The default is ten pages.

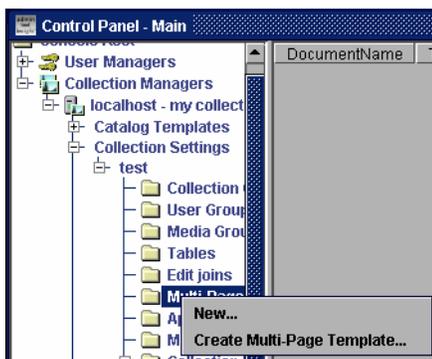
- 4) Select a Collection from the pull-down list.

- 5) Select a Document ID Field. All Fields defined in the Collection will appear in the selection pull-down list. All records containing common values in this field will be grouped together as a multi-page document.
- 6) Next to each Level Number, provide a Level Name. The Level Name explains the hierarchical level. For example, level 1 can be Plays, level 2 can be Acts, level 3 can be Scenes.
- 7) For each Level Name, select a Level Field. Only numeric Fields will be presented in the dropdown list.
- 8) Enter Minimum Page Count. You can specify a minimum number of pages to generate a multi-page document. The default is ten pages. A book cannot be created as a multi-page document if it has less than the minimum number of pages specified in the Minimum Page Count Field. For example, if the minimum pages is set to 99, then a book with 87 pages will not be created as a multi-page document. Only books with 99 pages or more will be created as multi-page documents.
- 9) In order to reset the Multi-Page Document Template counter to zero and to create new multi-page documents as specified, check or enable the checkbox that states, "Remove all existing entries and create new documents."
- 10) Press Create Documents to generate document entries into the Collection's document database.
- 11) Once you have created your Multi-Page Document Template(s) you must run the indexer with the Multi-Page Document option enabled. For more information, see Running the indexer for Fuzzy Date or Multi-page Document Indexing on page 154.

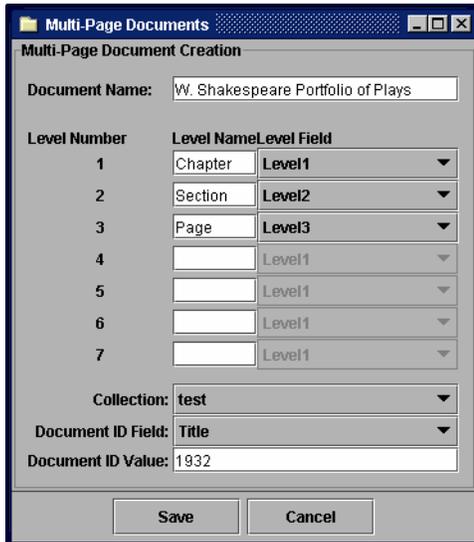
Creating a Single Multi-Page Document

The Administrator will use the Administrator Tools within Insight Collection Manager to create multi-page documents. Follow the steps below to create a single multi-page document.

- 1) To invoke the multi-page document options, open the Collection Manager node in Insight Administrator Tools.



- 2) Right-click on Multi-Page Document and select New. The Multi-Page Document Creation window appears.
- 3) In the Multi-Page Document Creation panel, create a document name that you want to display in Insight which reflects your record structure, for example, "W. Shakespeare Portfolio of Plays."



- 4) Next to the level number, provide a level name. The level number determines the order of the records that you will provide (number 1 being the highest level). The level name should be indicative of those areas or various levels that make up the document. In the example above, we've used Chapter, Section, and Page.
- 5) Select a level field. The level fields should correspond to the numeric field in your data record with information on where each page should be placed within the hierarchy.
- 6) Select a Collection. This is pre-loaded by you (Administrator).
- 7) Select a Document ID Field. This is based on the Collection that is loaded on your system. Use a value from the highest level for this selection.
- 8) Provide a Document ID Value. This is based on the value of your Document ID Field. This can be a title, author for a group of contents, or even an ISBN number. For example, it can be William Shakespeare or it can be ISBN: 0-395-74876-3.
- 9) Press Save
- 10) Once you have created your Multi-Page Document(s) you must run the Indexer with the Multi-Page Document option enabled. For more, see "Running the indexer for Fuzzy Date or Multi-page Document Indexing" on page 154.

Managing the Stop List

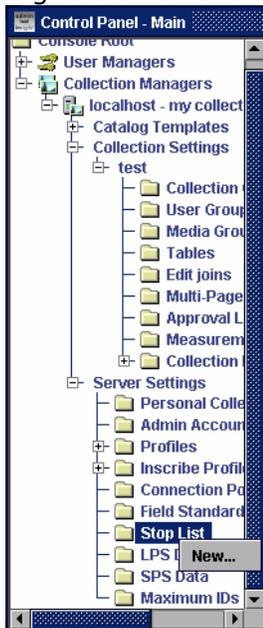
A stop list is a set of words that are not indexed – generally used to eliminate words that appear too universally to be of value in searching. Insight’s default list includes:

Table 3: Default values for Insight Stop List

A	an	and	are	as	At	be	but
By	for	from	had	have	He	her	His
In	is	it	not	of	On	or	That
The	this	to	was	which	with	you	

To add new terms to Insight’s Stop List:

- 1) Open the Insight Administrator Tools and connect to your Collection Manager.
- 2) Open the Server Settings node.
- 3) Right-click on the “Stop List” Entry and choose “new...”



- 4) Enter the term you would like to add to the stop list in the dialog box:



- 5) Press Save to add the term to the list.

Configuring the Insight Measurement Tool

The Measurement Tool allows insight to display images actual size in the Image Workspace, or allows comparison of images, displaying them in their relative sizes.

In order to use this tool, you must have **numeric** fields in your data for **Height** and **Width** values. Insight generates default values for measurement fields when creating a new Collection and these default values are made accessible to the Measurement Tool.

Depending on your data, the measurement tool provides two basic configurations:

- a) Where data for **Height** and **Width** are stored in different fields.

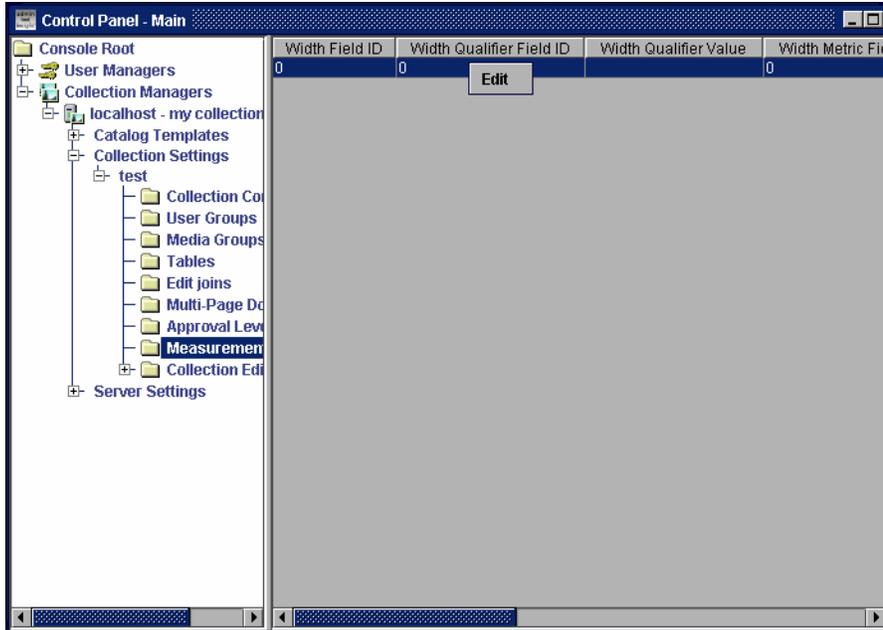
ObjectID	Height	Width
1	15	12
2	3	5
3	3	4
NOTE: height and width are in CM		

- b) Where one field may be used for either **Height** or **Width**, and another field is needed to tell which dimension the number represents.

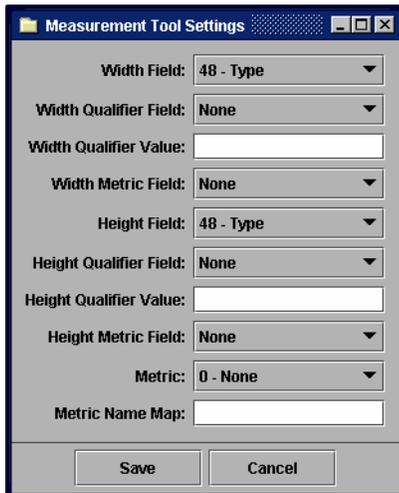
ObjectID	Numeric_Measurement	Dimension	Unit
1	5	Height	Cm
1	12	Width	M
2	4	Height	In
2	5	Width	In

To set up the Measurement Tool in Insight:

- 1) Open Insight Administrator Tools and Connect to the Collection Manager.
- 2) Open the Collection Settings Node and open the node for your Collection.
- 3) Click on the "Measurement Tool" node.



- 4) Right-click on the entry in the table to the right of the tree and select Edit from the pop-up menu. The Measurement Tool window appears:



- 5) Select a width field, height field, and define a metric from the pull-down list. When selecting the width and height fields, make sure you are only selecting numeric fields and not text fields.
 - a. To Configure the Measurement Tool where both **height** and **width** data is stored within the same field.
 - i. Select the same numeric Field for both Width Field and Height Field. This Field contains the measurement.
 - ii. Set both Width Qualifier Field and Height Qualifier Field to the field which specifies whether the numeric value is a height or

width.

- iii. Set the Width Qualifier Value and Height Qualifier Value to the values which should be matched for height and width. (common values may be "width", "height", "w", or "h").
 - iv. If you have a field which specifies the dimension unit, (i.e. whether a given value is in Inches, Centimeters, Meters, or another dimension, then specify that field in Width Metric and Height Metric.
 - v. Continue with steps "c" and "d" below.
- b. To configure the Measurement Tool where the **height** and **width** data are stored in different fields.
- i. Set the Width Field to the data field which contains the numeric **width** data.
 - ii. Set the Height Field to the data field which contains the numeric **height** data.
 - iii. If you have a field which specifies the dimension unit, (i.e. whether a given value is in Inches, Centimeters, Meters, or another dimension, then specify that field in Width Metric and Height Metric.
- c. Specify the preferred Measurement Unit in Metric.
- d. If you have entries with multiple unit types. (i.e. some records with widths in centimeters, some in inches, you can specify a metric map which will convert values from the unit field into the preferred unit type.

To construct a unit value map:

- i. Identify all of the various conventions for specifying units (i.e. inches, in., cm., etc.).
- ii. Construct a string with your mappings where specific values are separated by commas, and mapped to the numeric value for a unit in the pull-down by number. Separate different units with a semi-colon:

```
in,inch,inches=2;cm,centimeters,centimeters=4 ...
```

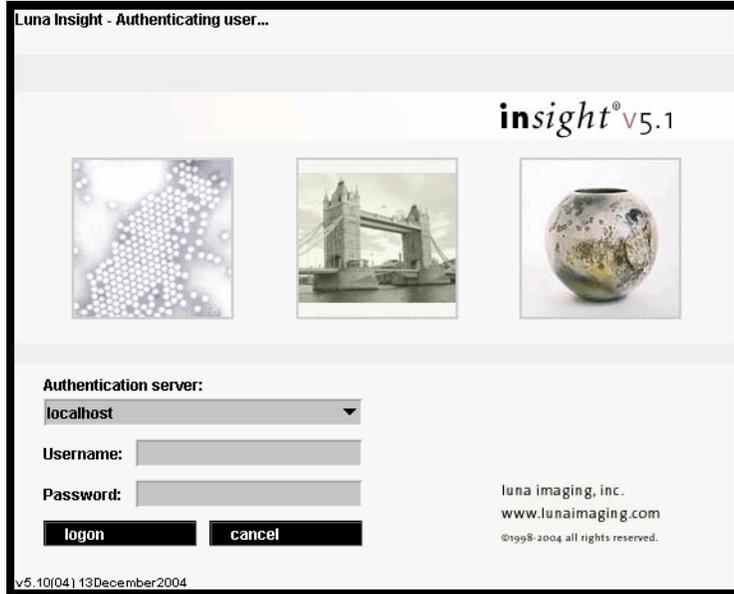
(In this example, in, inch, and inches are mapped to value 2 in the pull-down.)

- iii. Enter the unit value map into the Metric Name Map field.

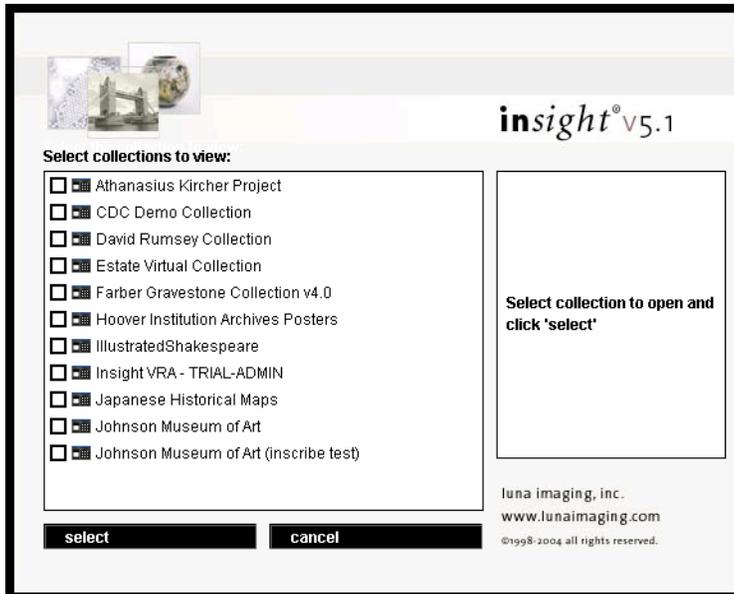
6) When you have completed your settings, click Save.

To test your configuration for the measurement tool

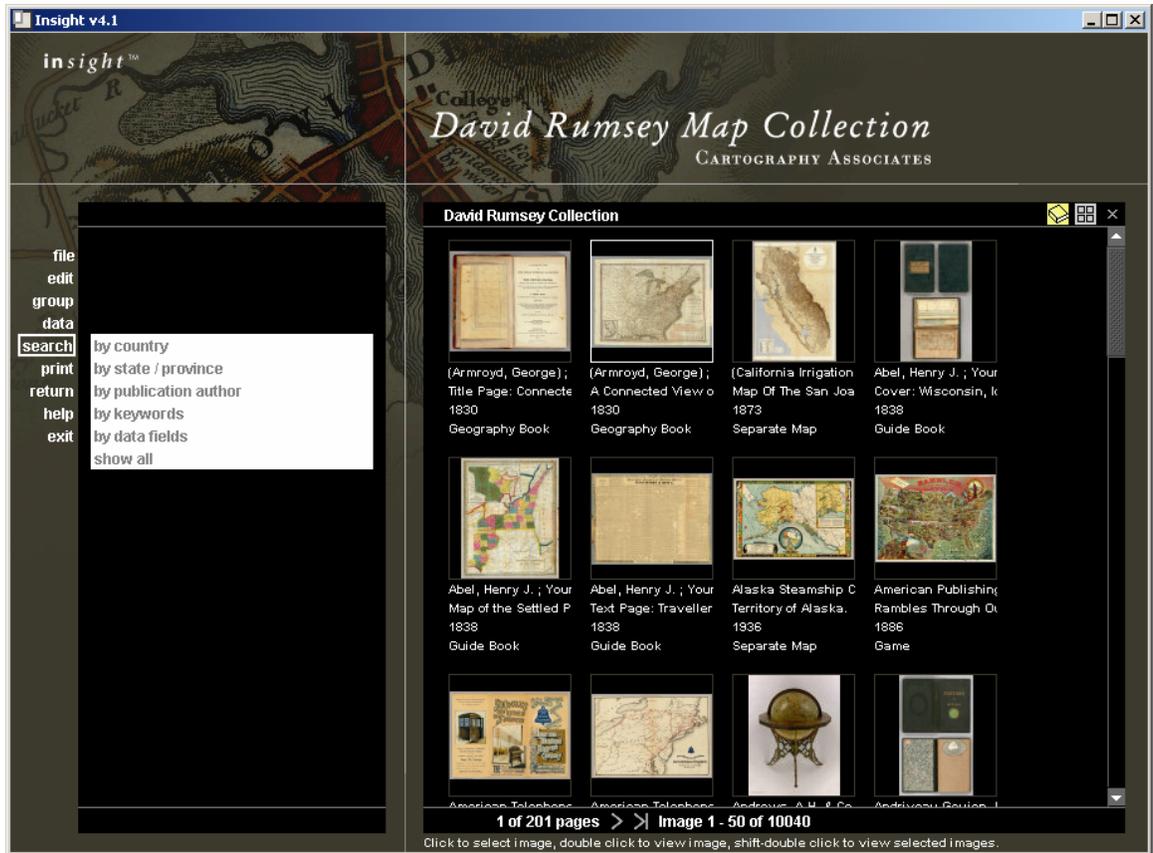
1) Start the Insight Java Client.



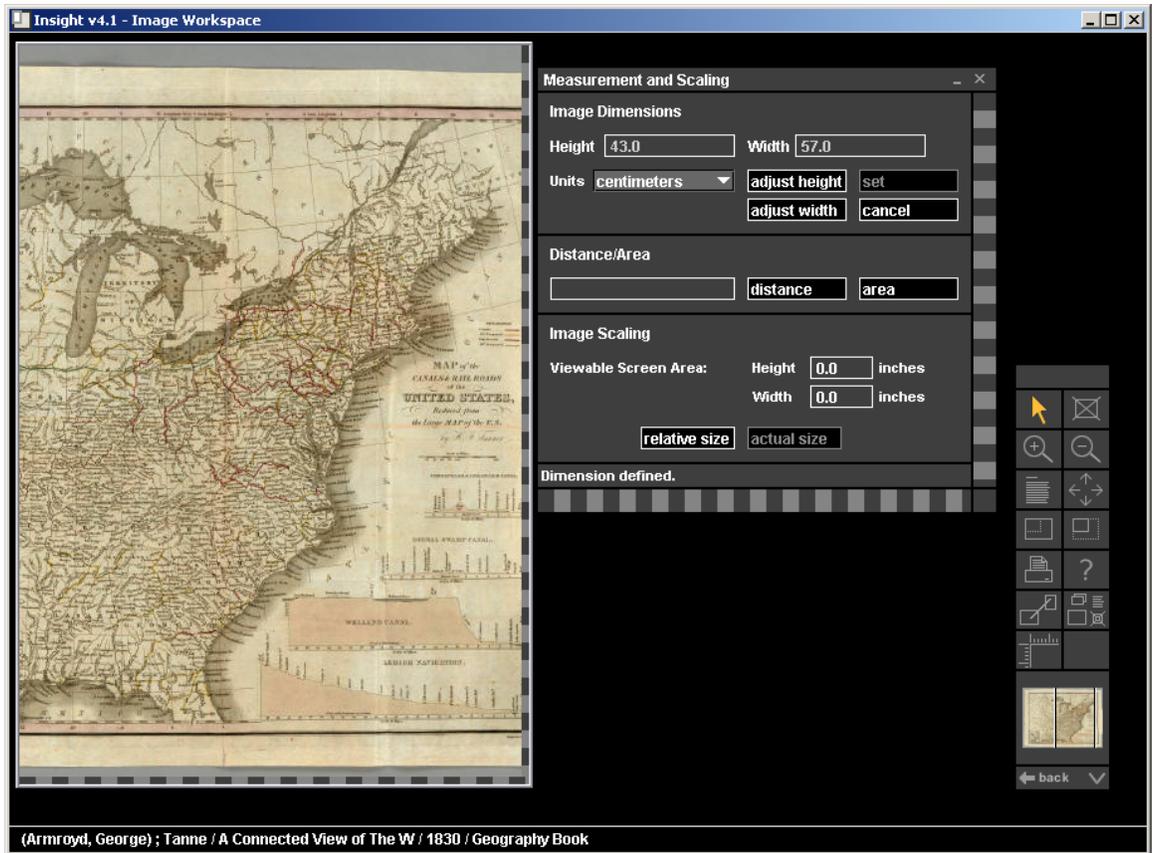
2) Login to your User Manager and open the Collection you just configured.



3) Double-click on an image in the Group Workspace to add it to the Image Workspace.



- 4) In the Image Workspace, open the "Measurement and Scaling Tool" from the Image Workspace Toolbar.



- 5) If measurement values are not displayed as expected, review your configuration in the Administrator Tools.

Managing Collections

Managing Advanced Access Privileges (Profiles & Inscribe Permissions)

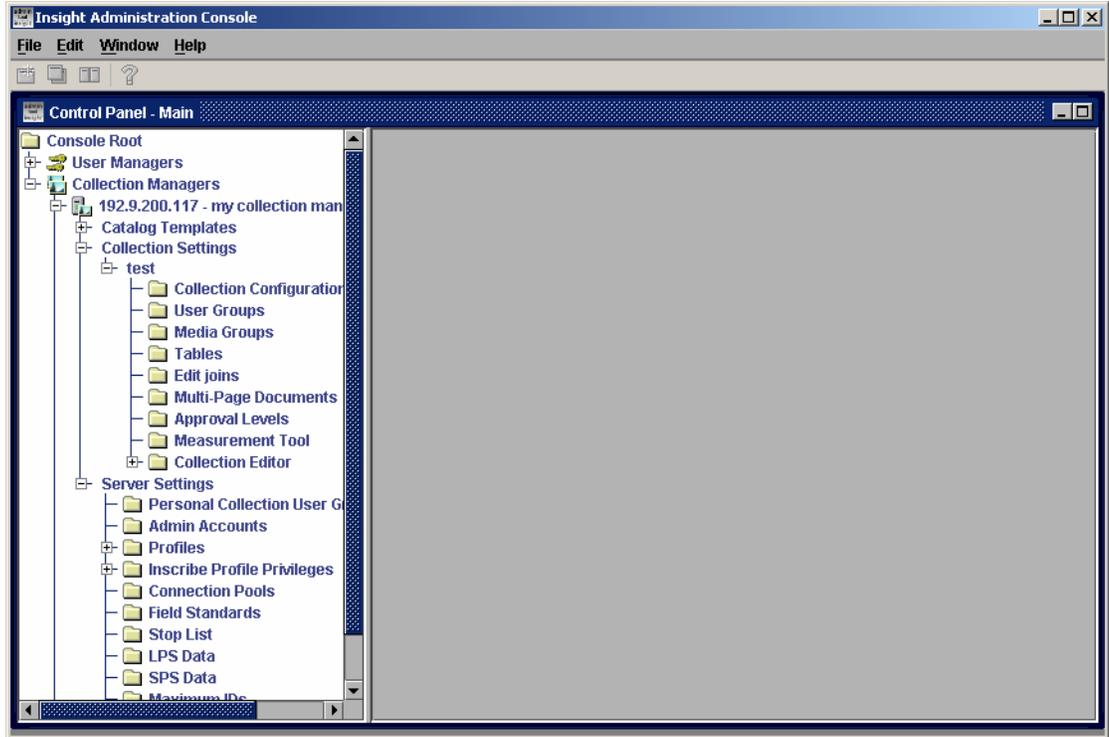
Depending on the type of user, you may choose to restrict access to specific tools. Insight provides an array of configurable permissions to restrict access to specific features or tools.

By default, Insight Studio creates five profiles for each Collection, tuned towards: Administrators, Editors, Catalogers, General Access, and Restricted Access users.

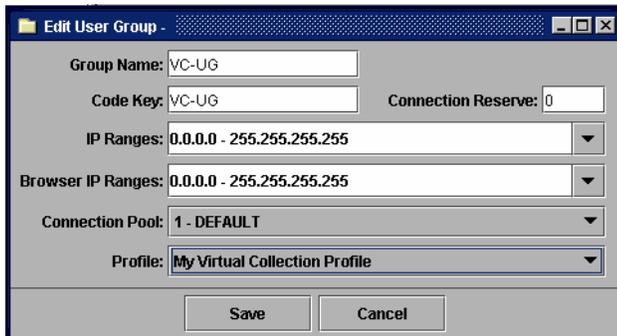
To create your own profiles or adjust existing profiles, use Insight Administrator Tools. Common tasks include changing the IP Address restrictions for a Collection, changing the image view and export permissions, and adjusting the Insight Administrator Tools User Permissions.

Adjusting the IP Address Restrictions for a Collection

- 1) Open the Insight Administrator Tools and connect to the Collection Manager which hosts the Collection you wish to manage.
- 2) Go to the Collection Settings node and open the entry for the Collection you wish to configure.



- 3) Click on the User Groups node for your Collection. Each User Group must map to a user group on the User Manager – these groups function as private keys between the User Manager and Collection Manager.
- 4) Right-click on the user group you wish to add the IP Restrictions to, and select Edit.



- 5) Specify IP Ranges (for the Insight Java Client) and Browser IP Ranges valid for the User Group. If you have multiple IP addresses or ranges, they can be separated by commas.

Examples	Insight IP Ranges
Allow all users	0.0.0.0-255.255.255.255
Allow users from 128.148.128.111 and 128.148.128.170	128.148.128.111, 128.148.128.170
Allow all users from the 128.148.128.*	128.148.128.0 – 128.148.128.255

subnet	
--------	--

- 6) Press Save.

NOTE: Collection Managers refresh cached User Group and Profile settings every five minutes, so your changes, while active in the database, may take a few minutes to fully take effect.

Adjusting Profile Settings for a User in a Collection

Within Insight, profiles are mapped to User Groups in the Collection Manager, which, in turn are mapped to user groups and users in the User Manager. (Please see Figure 33: Mapping of permissions from the User Manager to Collection Manager on page 237). Adjusting a profile will adjust permissions for one or potentially a large number of users. If you are unsure of which users are mapped to a given profile, you may want to create a new User Group.

There are two steps to adjusting the profile settings for a user in a Collection:

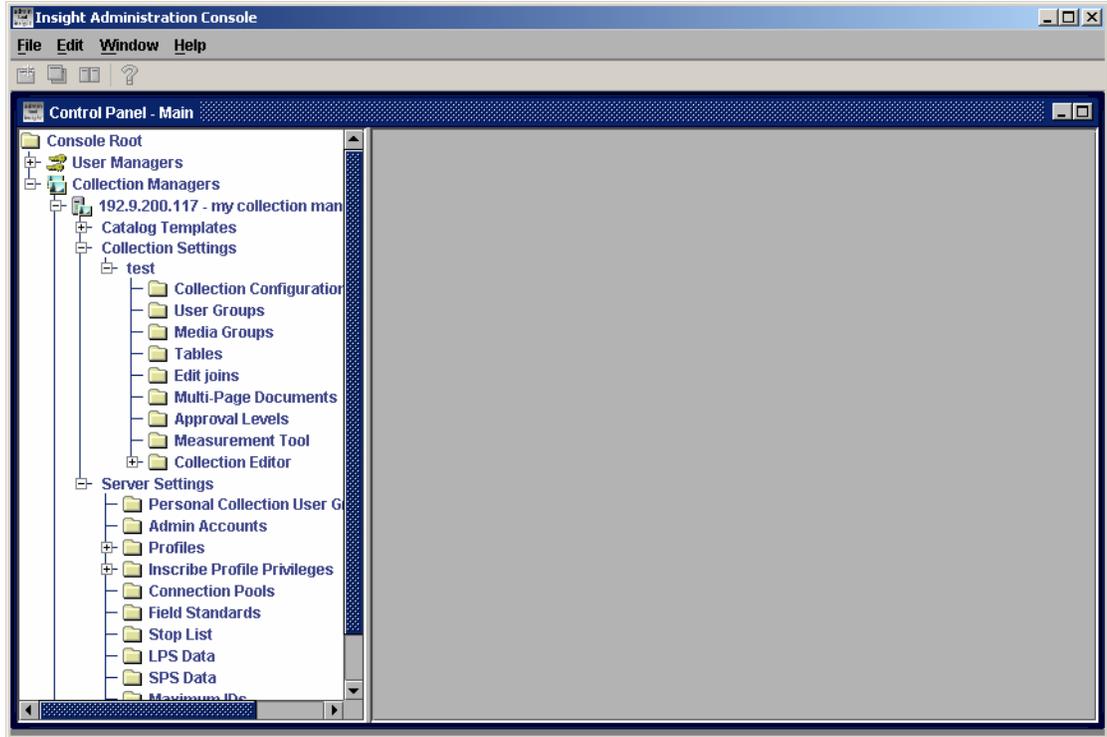
- a) Adjusting the profile (or creating a new profile).
- b) Mapping that Profile to a User Group.

Changing an Existing Profile or Creating a New Profile

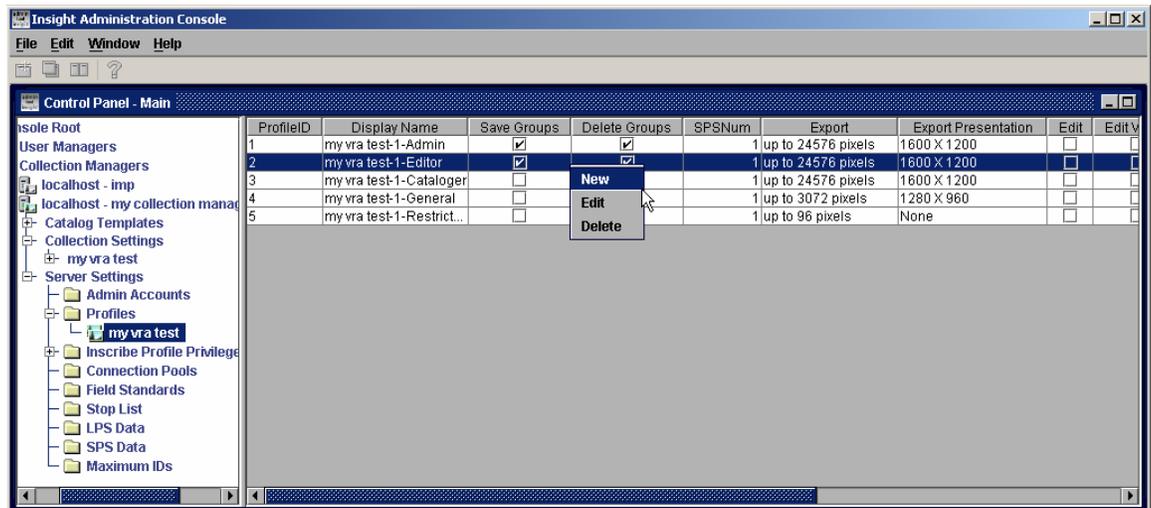
Profiles are Collection-specific groups of rights and permissions.

To change an existing profile, or create a new profile:

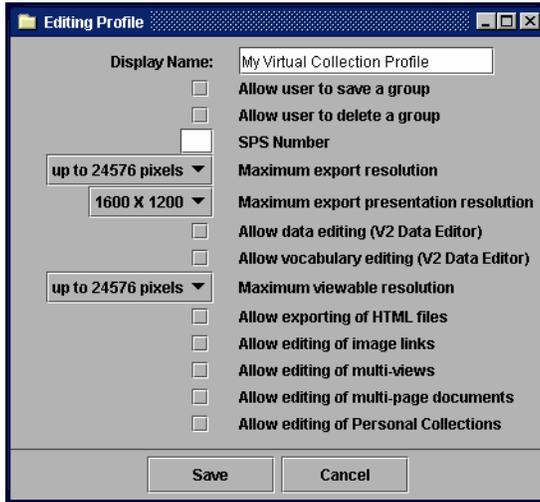
- 1) Open Insight Administrator Tools and connect to the Collection Manager which hosts the Collection you wish to manage.
- 2) Go to the Collection Settings node and open the entry for the Collection you wish to configure.



- 3) Click on the Profile node for your Collection. On the table to the right is a list of existing profiles. Review them, and see if any of them match the set of permissions you wish to use. For a list of the Default Profiles created with an Collection or Personal Collection, please see Table 16: Default Profiles for Collections and Associated Permissions and Table 17: Personal Insight Manager Default Profile Privleges on pages 240 and 240. If they do, please see the next section, on mapping a profile to a user group. If they don't, right-click on an existing profile and select add.



- 4) Enter the specific restrictions you want for the user, and the SPS Value for the Collection (this should be the same for all profiles).



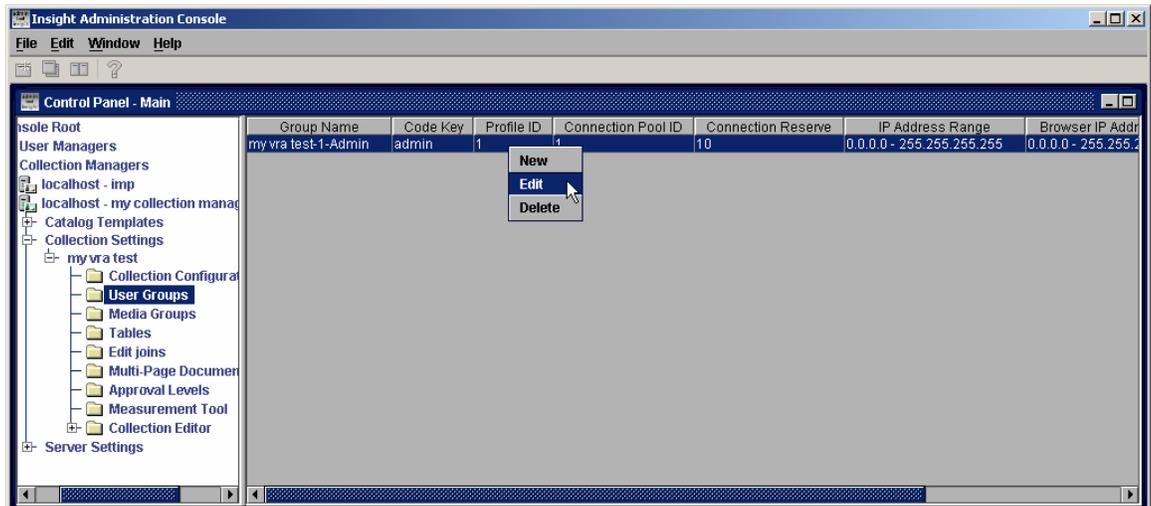
- 5) Press Save.
- 6) If Inscribe-specific permissions changes are necessary, open the "Inscribe Profile Privileges" node and adjust the settings for your profile (there's a 1:1 correlation between Profiles and Inscribe Profiles).

Mapping a User Group to a Profile:

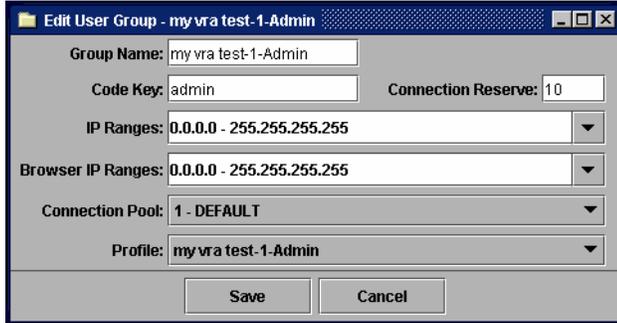
Once you have created or modified your profile, you must map it to a specific User Group in order to change the permissions for a user.

To map a Profile to a User Group:

- 1) Open the User Groups node for your Collection (located under Collection Settings).



- 2) Right-Click the entry you want to edit and select "Edit".



The screenshot shows a dialog box titled "Edit User Group - my vra test-1-Admin". It contains several fields and dropdown menus: "Group Name" is set to "my vra test-1-Admin"; "Code Key" is "admin" and "Connection Reserve" is "10"; "IP Ranges" and "Browser IP Ranges" are both set to "0.0.0.0 - 255.255.255.255"; "Connection Pool" is "1 - DEFAULT"; and "Profile" is "my vra test-1-Admin". At the bottom are "Save" and "Cancel" buttons.

- 3) Make your selection from the Profile pull-down.
- 4) Press Save.

Changing the Admin Account Permissions for a Collection

For more information on changing the Admin Account Permissions, please see Managing Administrative Users on page 110.

Advanced Configurations for Access & Permissions

There are many advanced settings and configurations for permissions and access in the Administrator Tools. Below is a list of the main configuration settings and where to find them in the Insight Administrator Tools.



WARNING: Be careful when adjusting these settings. Back up your settings before you make any changes.

Table 4: Advanced Permissions and Access Restrictions and where to control them in the Insight Administrator Tools

	User Groups	Admin Accounts	Profiles	Inscribe Profiles	Approval Levels	Record Types	Record Fields
Restrict Access by IP Address (Java Client)	X						
Restrict Access by IP Address (BrowserInsight)	X						
Max Viewable Image Size			X				
Max Exportable Image Size			X				
Max Exportable Presentation Resolution			X				
Can save groups at the Collection level			X				
can delete groups at the Collection level			X				
Can save annotations at the Collection level			X				
Can export HTML Files			X				
Can Create MultiView Images			X				
Can create facing pages in MultiPage Documents			X				
Inscribe Permissions							
Can View Data in Inscribe				X			
Can Edit Data in Inscribe				X			
Can Add new Data in Inscribe				X			
Can Delete Data in Inscribe				X			
Can Link Data Records				X			
Can Link Data Records to Media				X			
Associate an approval level with profile*				X			
Can View/edit a specific record type*						X	
Can Add new values to a fields (by approval level)*							X
Can publish changes to Insight					X		
Can publish changes to external source tables**					X		
Specify Position in Workflow Process					X		
Insight Administrator Tools Permissions							
Can view Collection information		X					
Can edit Collection information		X					
Can delete Collection information		X					
Can add media, run indexer		X					
Can Administer other Admin Users		X					
Can Manage Collection in Insight Studio		X					
Can Manage User Manager in Insight Studio		X					
* Approval levels are advanced features of the Inscribe Cataloging tool and can be complex to configure.							
** Not all Collections have "source tables"							

Adding a Remote Collection or New Collection Manager / Personal Insight Manager to your User Manager

There are three types of Collections that can be defined in the User Manager:

A Master Server: This references a Collection Manager that you manage. It is used to logically group Collections in the Insight Studio Login Panel and provides a default Institution ID, Server Address and Port for new collections. Entries in the Collection Root node are used to automatically add new Collections to the User Manager as they are created within Insight Studio.

A Personal Collection Server: This is used to tell the Insight client that the server mapped is a Personal Insight Manager. The client will then ask the Personal Insight Manager for a list of Personal Collections to which the User has access.

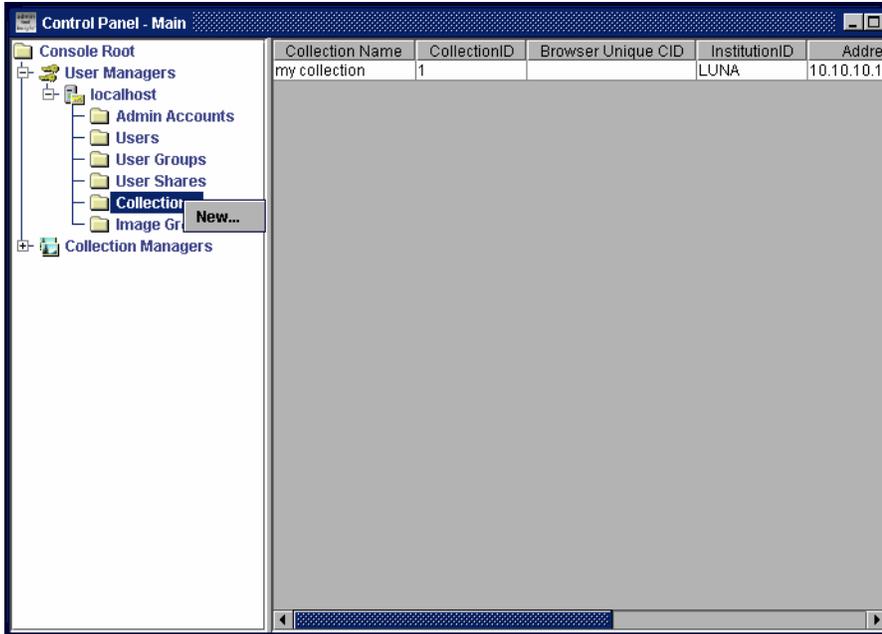
A single Collection: This references a specific Collection within a Collection Manager or Personal Insight Manager. Entries are created automatically by Insight Studio for Collections that are created using the tool. If you want to add access to a Shared Collection on a remote server (one you don't manage), you would add it using this type.

Table 5: Required Information for Adding a new Collection

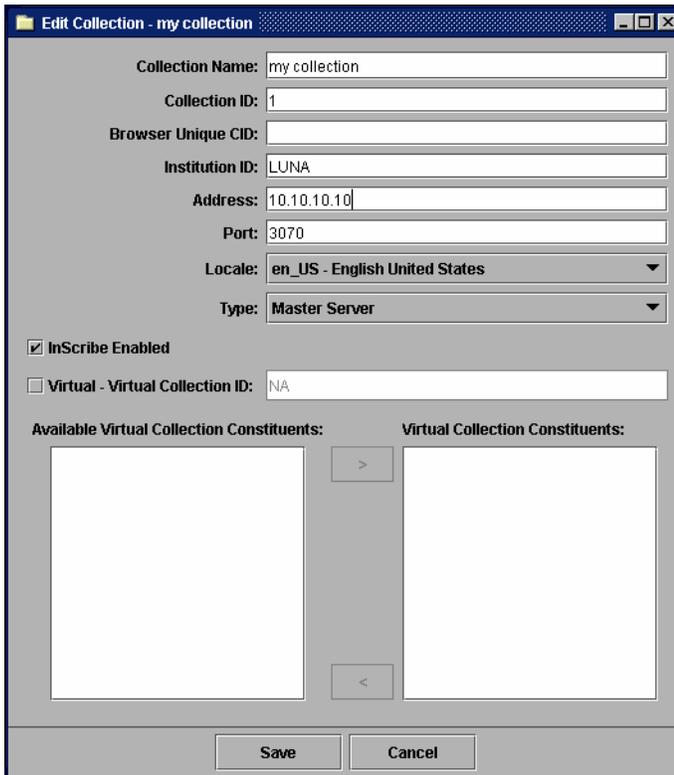
Collection Server Type	Master __ Collection __ Personal Collection ____
Collection Server Hostname	
Collection Server Port	
Institution ID	
Collection ID	
Virtual Collection ID	
Locale (language / country code)	
User Group Name*	
Code Key*	
*NOTE: These are CASE SENSITIVE	

Adding a Collection entry to your User Manager

- 1) Complete the form above for the Collection you wish to add.
- 2) Open Insight Administrator Tools and connect to the User Manager.
- 3) Right-click the Collections node and select New.



- 4) Enter in the information for your Collection, Master Collection, or Personal Insight.

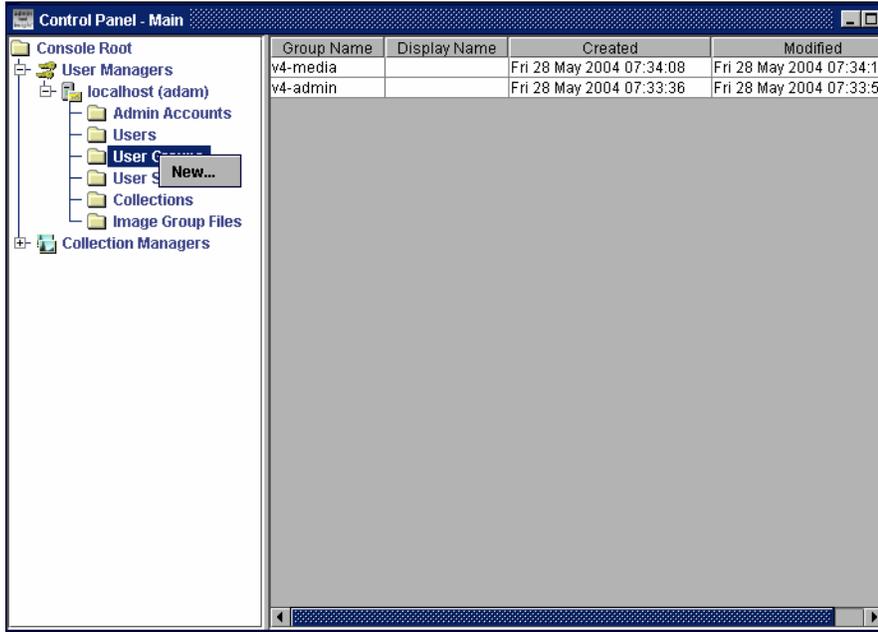


- 5) Press Save.
- 6) If you are adding a single Collection, as opposed to a Master Collection Manager entry or Personal Collection Master entry, then you will need to add

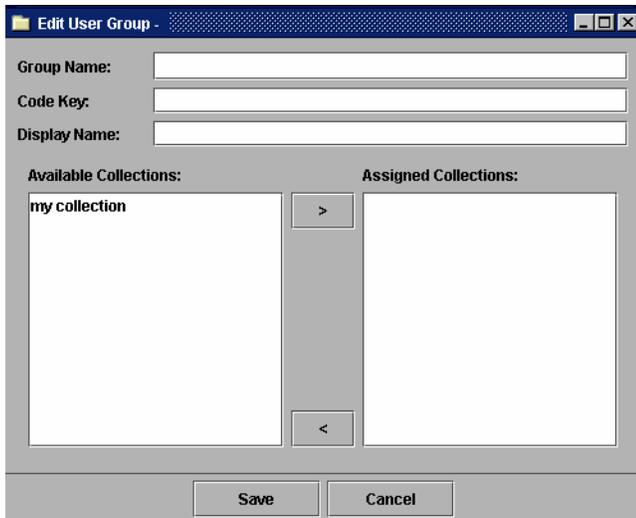
a user Group to enable users to login to the Collection via the User Manager (please follow the steps in the next section).

Adding a User Group

- 1) To add a user group, Right Click on the User Groups node and select New.



- 2) Enter Group Name and Code Key (remember that these are CASE SENSITIVE), and then add the Collection you just added to the list of Assigned Collections.



- 3) Press Save.

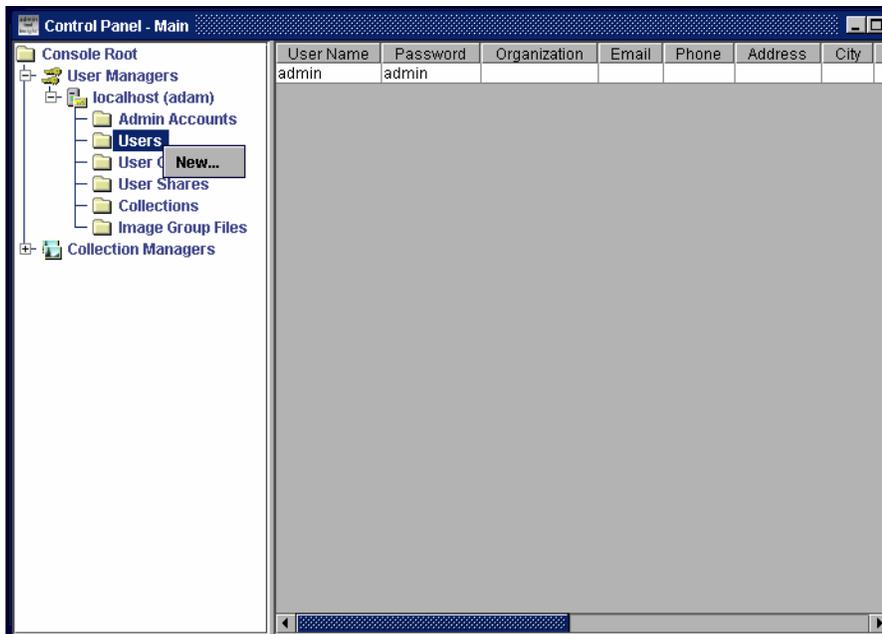
- 4) You can now manage access to your Collection (via the user group) in both Insight Administrator Tools and Insight Studio. If you would like to enable access to this Collection for a user via the Insight Administrator Tools, please follow the steps in the next section.

Adding / Editing a User and Assigning Access to Collections Using User Groups in the Insight Administrator Tools

To assign access to Collections for specific users in Insight, you must associate users with User Groups (which are tied to specific Collections). (please see Figure 33: Mapping of permissions from the User Manager to Collection Manager on page 237 for a diagram).

To add or modify a user:

- 1) Connect to your User Manager.
- 2) Expand the Users node, and either right-click/Edit an existing user or right-click the Users section and select New to add a new User.



- 3) If you are adding a new user, enter in the required information including username, password, first name and last name.

NOTE: If you are using Oracle as your backend database, the username and password will be case sensitive.

Username:

Password:

First name:

Last name:

Organization:

E-mail:

Phone:

Address:

City:

State:

Postal code:

Country:

Available Authentication Groups

v4-media
v4-admin

Assigned Authentication Groups

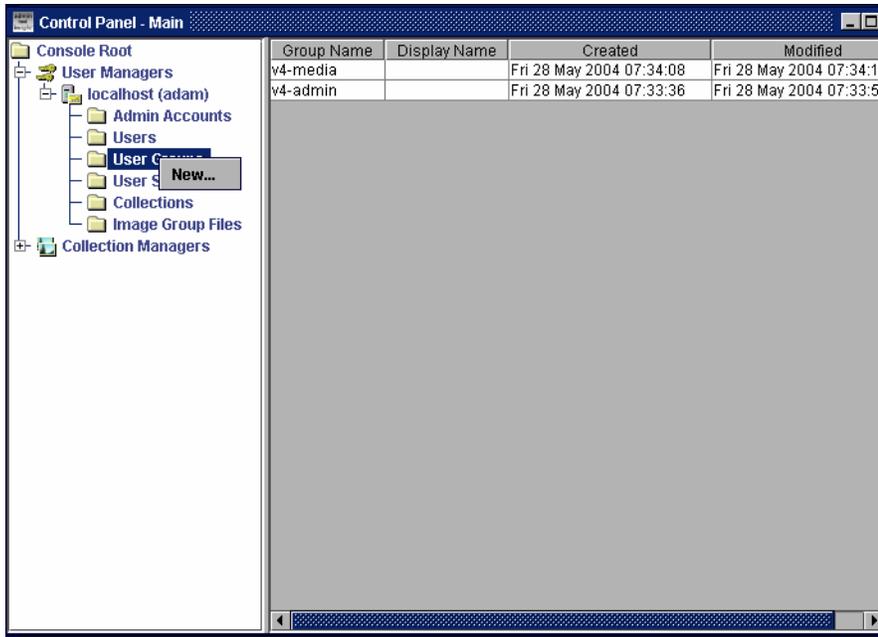
Save Cancel

- 4) Assign access to the "User Group" (Authentication Groups) or set of User Groups for the Collections you wish to grant the user access.
- 5) Press Save.
- 6) Log into the Java Client to test the username and password.

Deleting User Groups

To delete a User Group:

- 1) Click on the User Groups node in the Insight Administrator Tools.



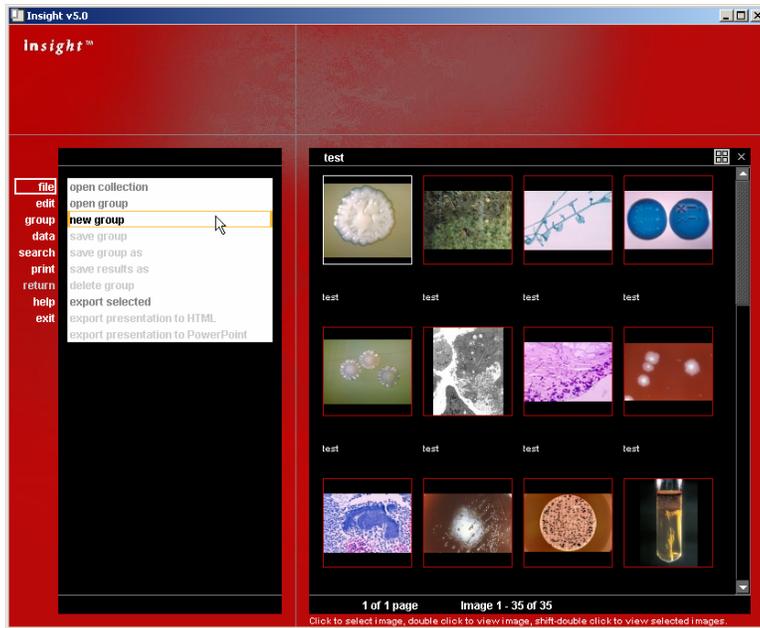
- 2) Select the User Group you wish to delete.
- 3) Right-Click on the User Group you wish to delete and choose "delete."

Creating a Virtual Collection

Virtual Collections are logical subsets of content from normal Collections. They can be created to grant access for specific users to part of a Collection with restricted rights, or to better organize a group of content.

To Create a Virtual Collection:

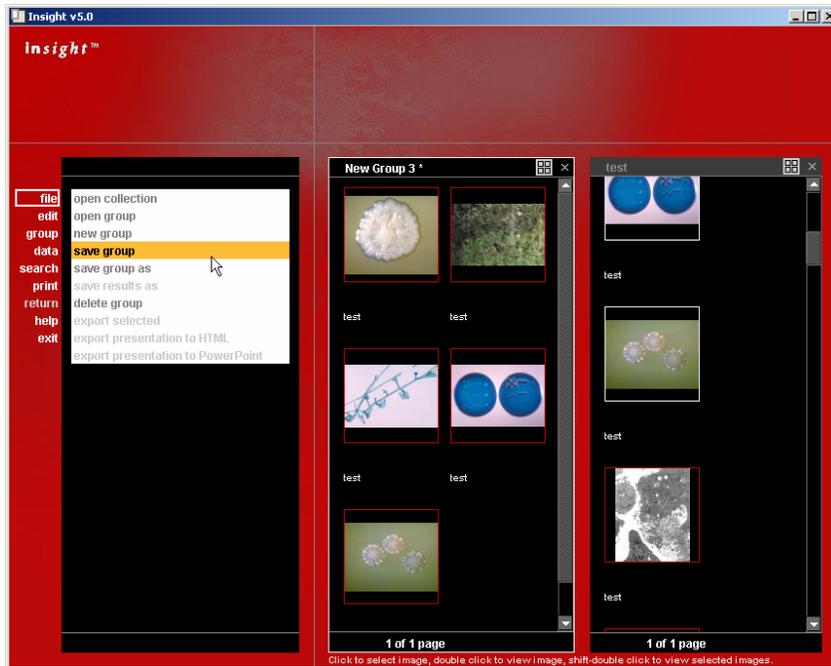
- 1) Log Into the Insight Java Client with administrative access.
- 2) Select the Collection which contains the content for the Virtual Collection.
- 3) Select **File | new group** from the menu.



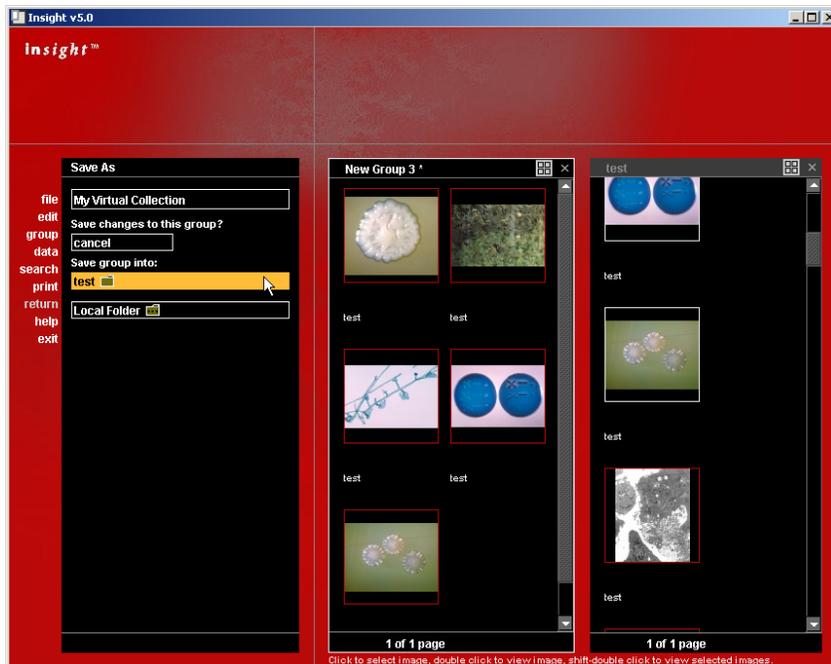
4) Drag records you want available in the virtual Collection into the new group.



5) Select File | save group from the menu.

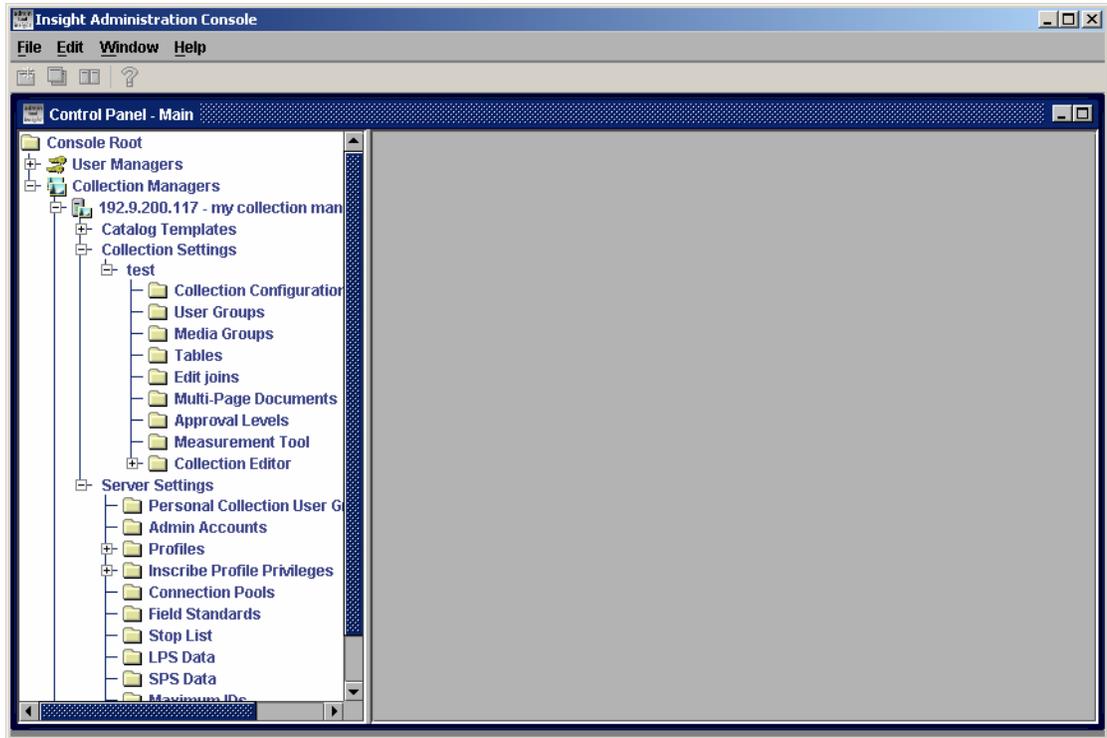


- 6) Name your group the name you want for your Virtual Collection.
- 7) Then choose the Collection Level Share (this should be the share that is at the top of the list, and also has the same name as your Collection).

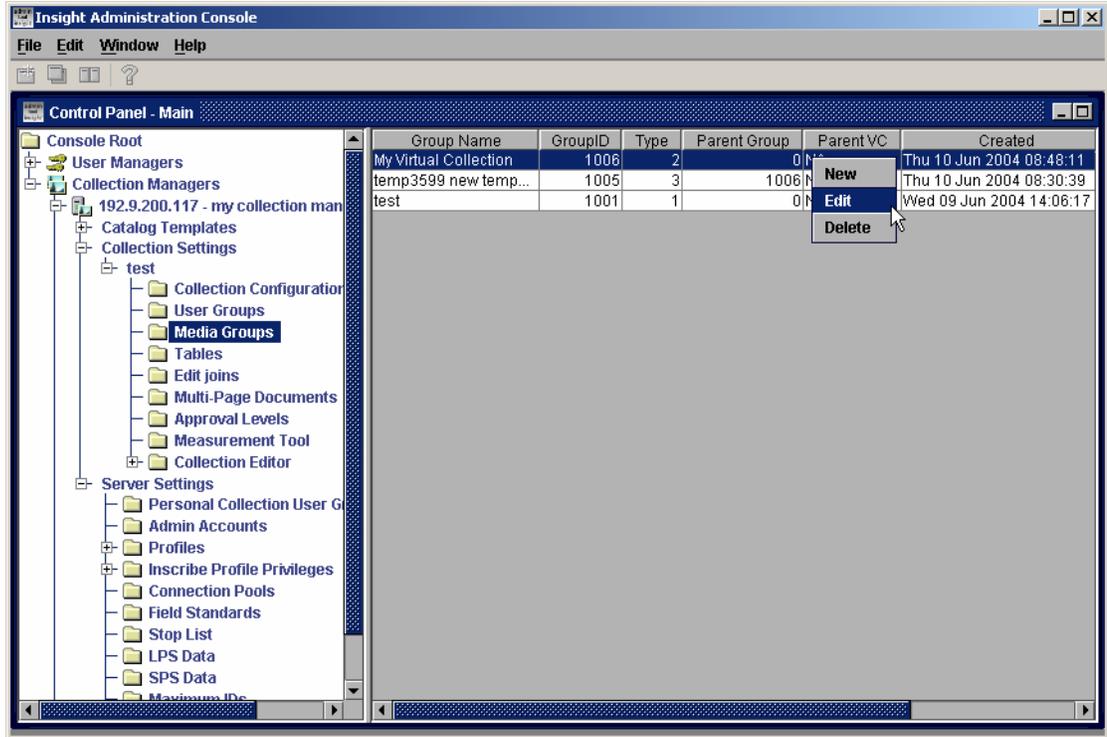


- 8) Exit the Java Client.
- 9) Open the Insight Administrator Tools.

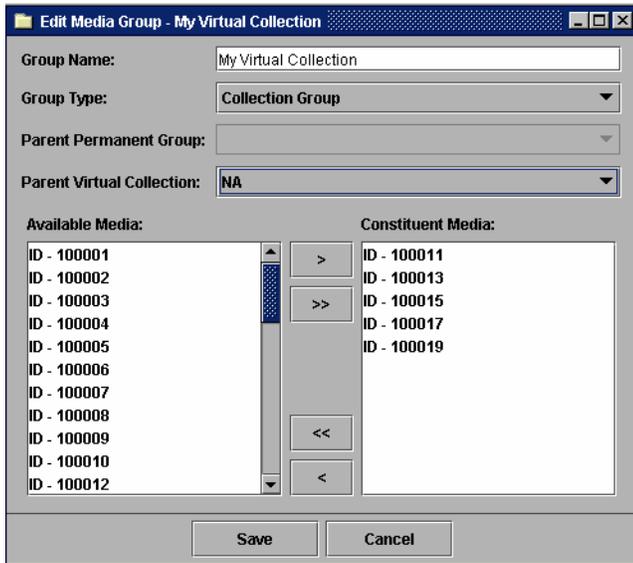
- 10) Connect to the Collection Manager containing the new group.
- 11) Expand the Collection Settings node, locate and expand the Collection's node.



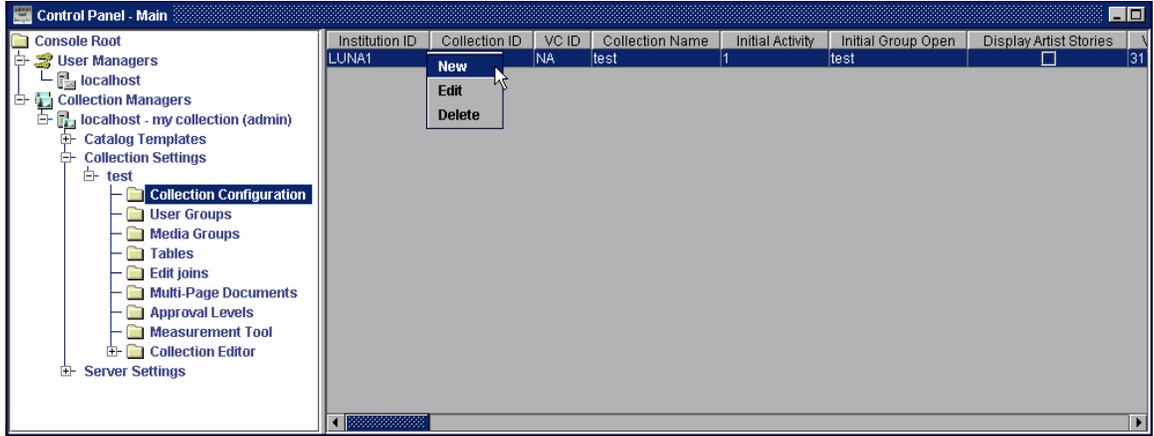
- 12) Expand the Media Groups area and locate the group you just added.
- 13) Right-click on the group and select Edit.



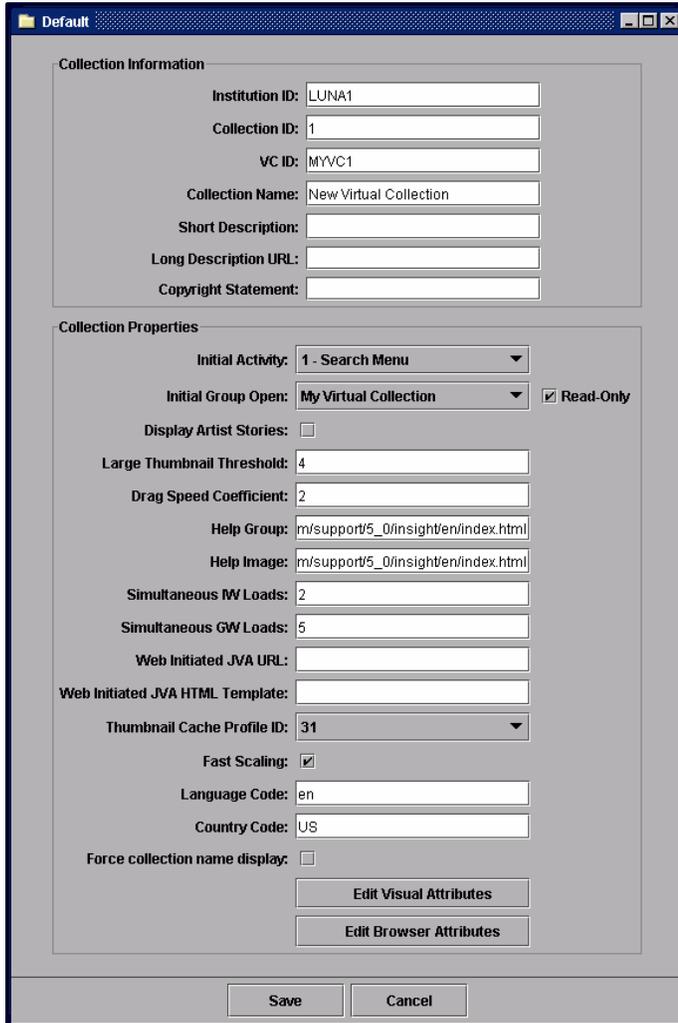
14) Change Group Type from Permanent Group to Collection Group.



15) Select the Collection Configuration node, right click and create a new Collection.



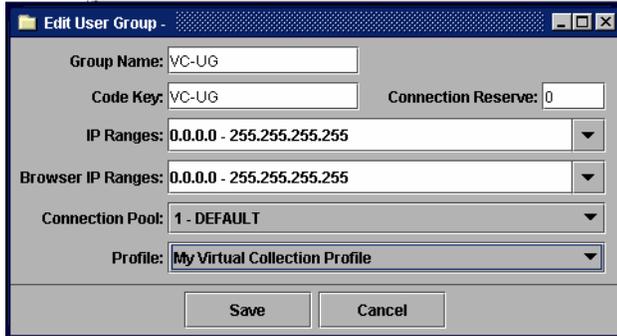
- Duplicate the Collection ID and the Institution ID, but specify a VC ID (No Spaces. Numbers and letters are OK) and choose the group just added from the Initial Group Open list.



17) Press Save (for the Collection configuration).

18) Open the Media Group node and edit your Virtual Collection's Media Group.
 a. Change the Parent Virtual Collection in the pull-down to the Virtual Collection ID (VCID) for your Virtual Collection.

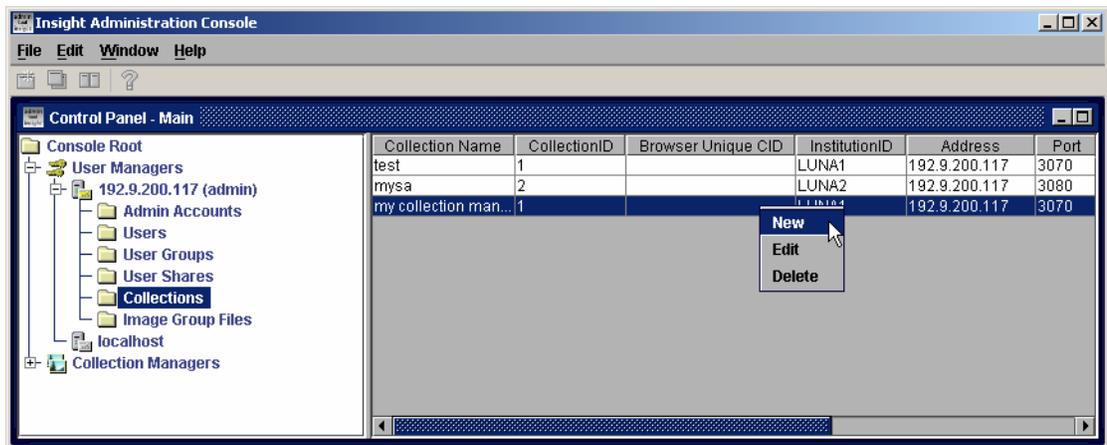
19) Right-Click the User Groups node and Create a new User Group.



- a. Choose a Group Name and Code Key.
- b. Select a Profile from the pull-down list.
- c. Press Save.

20) If you have not already, add the parent Collection (the Collection of which the Virtual Collection is part of) to your User Manager (see Adding a Collection entry to your User Manager on page 181 for more information).

NOTE: Although you may not be granting access to the parent collection, the entry is required in order for the collection to operate properly.



Edit Collection -
 Collection Name: My Virtual Collection
 Collection ID: 1
 Browser Unique CID:
 Institution ID: LUNA1
 Address: 192.9.200.117
 Port: 3070
 Locale: en_US - English United States
 Type: Collection
 Enable Collection Management
 Virtual - Virtual Collection ID: MYVC1
 Available Virtual Collection Constituents: mysa
 Virtual Collection Constituents: test
 Save Cancel

- 21) Add the Virtual Collection to your User Manager. Follow the instructions on page 181). When you add the Collection entry, make the following adjustments:
 - a. Click the Virtual Collection Checkbox.
 - b. Set the VCID entry to the number you specified earlier.
 - c. Choose the parent collection from the "Available Virtual Collections Constituents" and add it to the Virtual Collection Constituents.
 - d. Press Save.
- 22) Right-Click on the User Groups node in your User Manager and create a new User Group.
- 23) Enter the Group Name and Code Key you specified in the User Group you created for the Virtual Collection.
- 24) Add the Virtual Collection to the list of available collections for your User Group.
- 25) You may either open Insight Studio and add access to your User Group from there, or select the Users node and add access to specific users in the Insight Administrator Tools.
- 26) Create a Background Image for your Virtual Collection.
 - a. Choose a Background Image.
 - b. Either:
 - i. Follow the steps in the Collection Backgrounds in Insight 5 on page 196.
 - ii. Create a theme in Insight Studio, which will create a directory called Theme-Templates, storing all of the images for the themes. Then follow the instructions from page 203 for 209 on moving the media to the server and updating the collection background entries.

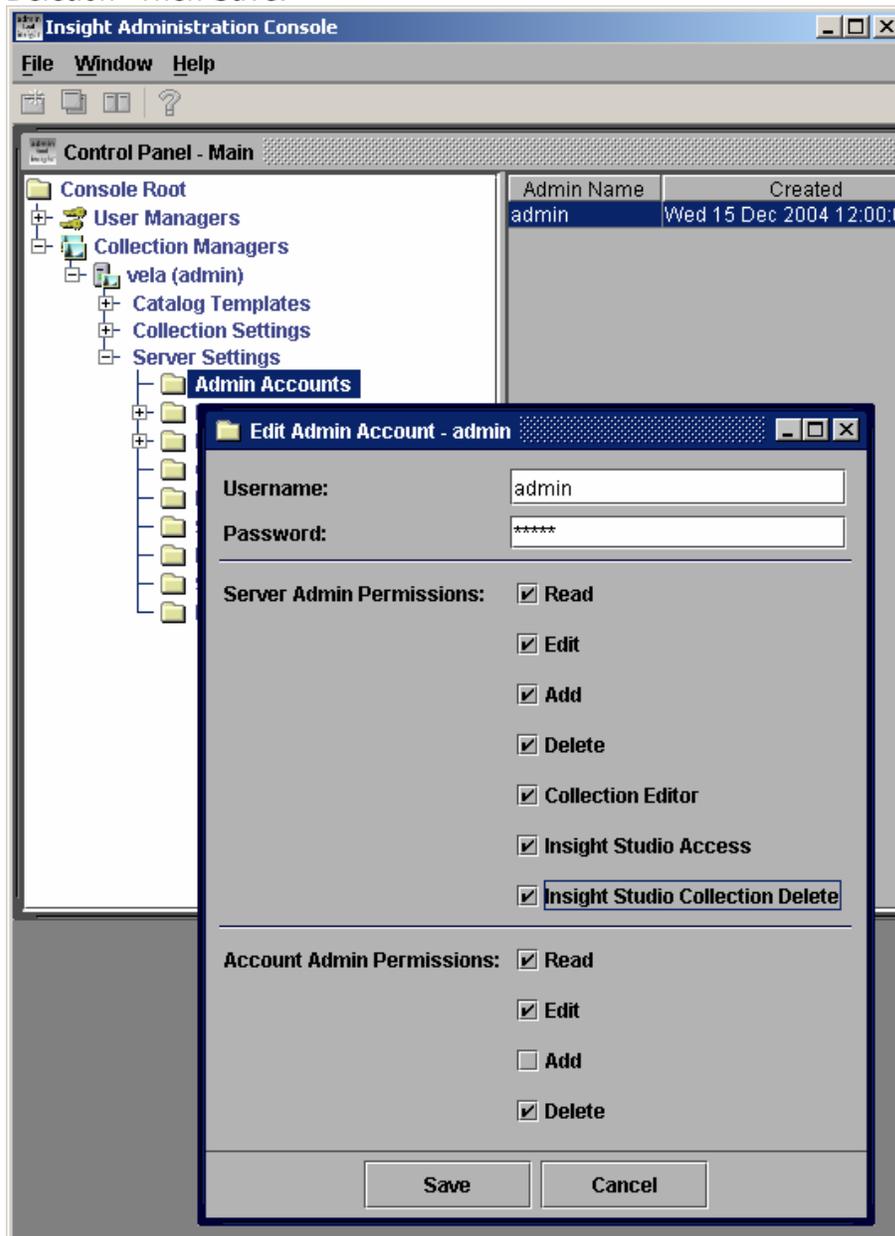
Deleting a Collection

Once you delete a Collection, you cannot restore it (except from a backup). Please follow these instructions only if you really wish to delete your Collection.

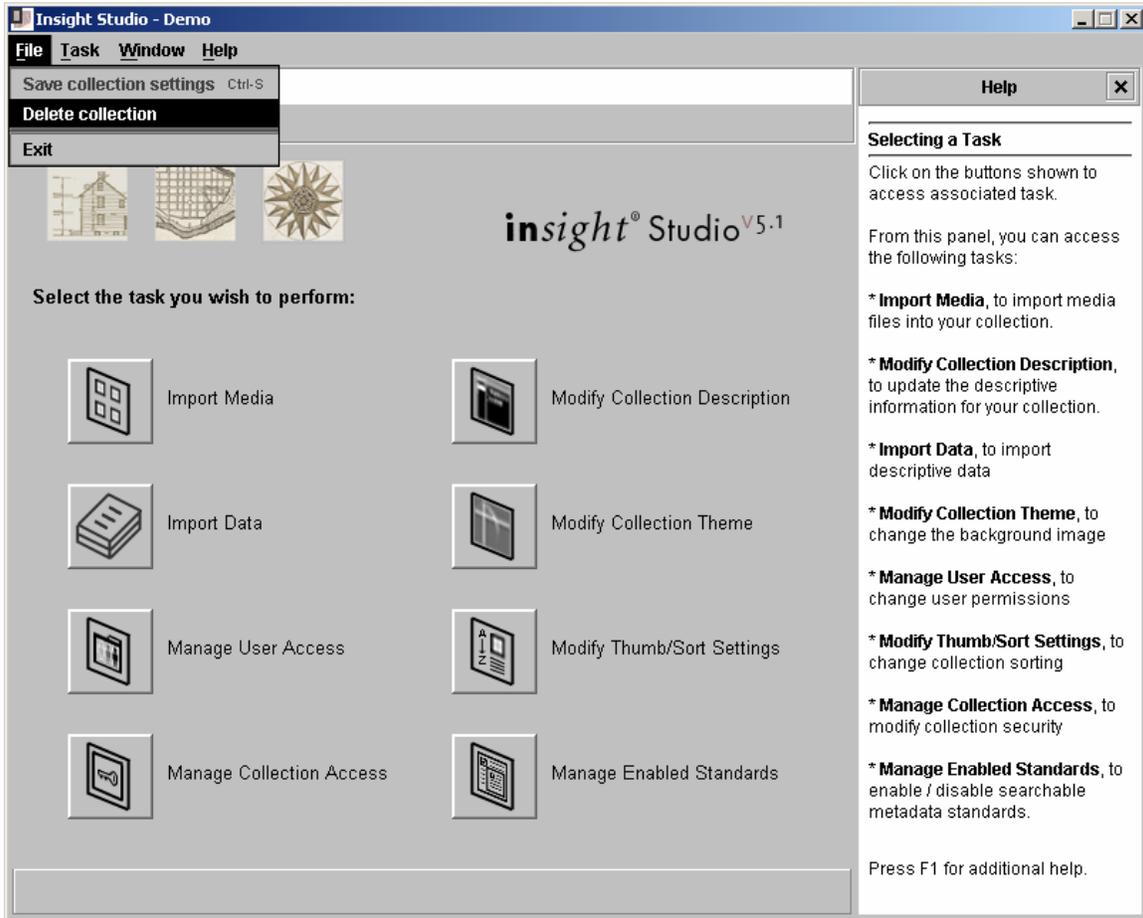


WARNING: This will destroy all content related to this collection. We strongly suggest backing up your database before this operation.

To delete a collection, you must have the privilege to do so. To grant the right of collection deletion, open the Insight Administrator Tools go to Server Settings and edit the Admin Account for the privileged user. Select "Insight Studio Collection Deletion" Then Save.



Login to Insight Studio Select the collection you need to delete. Under the file menu you will see Delete Collection. Select Delete. You will be prompted and warned before the deletion is committed.



Deleting a Collection's Content

The last major step in deleting a Collection is to delete the Collection's media from the Media Manager. Before you delete the content, it is wise to back up the media onto CD, DVD, or other device/media.

To Delete a Collection's Content from the Media Manager:

- 1) Locate the media root for your Media Manager.
- 2) Within the Media Manager root, there should be different directories representing the different size derivatives for Insight. Within each "Size" directory is a directory for each Collection.

- a. Locate the directory for your Collection. Its name will be constructed from the Collection ID + "-" + Institution ID + "-" + VC ID.
 - b. Delete the directory for your Collection.
- 3) Repeat for all other directories.

Collection Backgrounds in Insight 5+

Insight Collections are always presented over a background graphic. Though Insight provides a standard background, Collection builders can create custom backgrounds that can give a Collection a unique look.

Two methods of building custom backgrounds

Insight's Collection Theme Tool

An easy-to-use and powerful automated tool that can turn any graphic image into a properly formatted background for both the Insight Java Client and Browser versions of Insight. The tool automates all steps in the process, including installing graphical components in the proper destination directories, and making all necessary changes in the Collection Manager configuration to use the custom background.

Building a Custom Background Manually

A manual process that gives a designer more control over the final result, but requires all steps to be performed by hand.

Manually Creating and Installing Custom Backgrounds

Designing a background is only the first of five steps in changing a Collection's background:

- 1) Designing a Custom Background for the Insight Java Client.
- 2) Creating a Browser Background from a Insight Java Client Collection Background.
- 3) Moving Background Graphical Elements to the Media Manager.
- 4) Testing Background Graphical Elements in Media Manager.
- 5) Configuring the Collection for a Custom Background.
- 6) Testing the Collection and its Custom Backgrounds.

Designing a Custom Background

The Insight Background image consists of a number of Elements:

- The initial image (800x600 pixels max).
- The cross-hairs that separate the task area and the groups.
- The Insight Logo.
- A layer that blends the image and the background color.
- A solid color to be used for screens that are larger than 800x600.

NOTE: The horizontal and vertical gray lines that divide the Group Workspace are part of the background graphic and continue into the fill area. These lines must always be the same color and in the same location. Changing the color or location of the lines on the graphic will break the illusion of a continuous line. Do not change the line color, do not move the lines.

Using the Photoshop Background Template

A Template for creating Insight backgrounds in Adobe Photoshop has been provided for you. It contains layers with predefined components, layers to guide placement of custom graphic elements, and a layer to simulate how it will look when in use in an Insight session (these layers will be described below).

- a. A Template for creating Insight backgrounds in Adobe Photoshop can be found on either "5.1 Upgrade" or "Server Components" CD's in the following location:

```
\utilities\jva-background\insightbackground.psd
```

- b. Open the Template in Adobe Photoshop.

The image size is preset at 803x590 pixels and should not be changed.

Using the Predefined Template Layers

These layers are provided to help you rapidly create and preview pleasing background artwork:

- **Divider Lines** – Insight divides the Group Workspace into panels, placing interactive dynamic elements into each panel. These lines mark the borders of the panels, and must not be moved. The lines will continue beyond the graphic, painted into the remaining background fill area on user screens. For continuous lines, do not change the color of these lines.



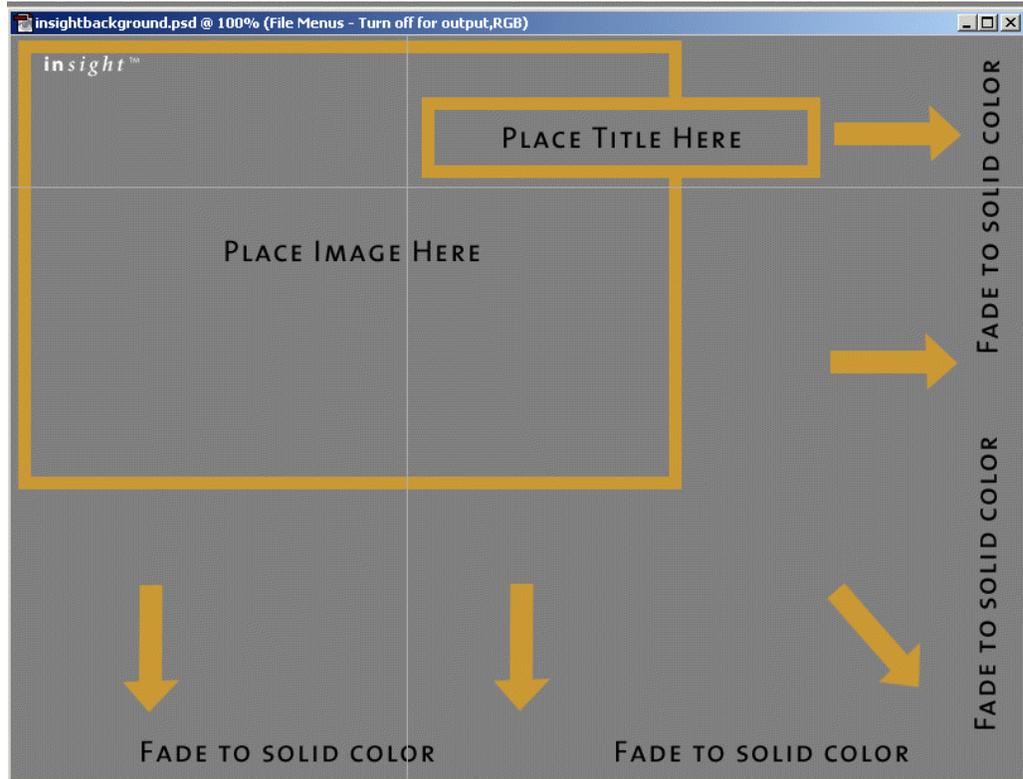
WARNING: Do not alter this layer, Layer should be visible when exporting graphic.

- **Insight Logo** – Users familiar with Insight will recognize the logo when they open your Collection and will instantly know how to use it.

NOTE: Standard usage leaves this layer unchanged, Layer should be visible when exporting graphic.

- **Guidelines** – This reference-only layer shows how graphic elements are traditionally placed in Insight Collection backgrounds. Follow these guidelines and you will create a compliant, aesthetically pleasing background.

NOTE: Informational layer, TURN OFF for output.



- **File Menus** – To see how your background will look in Insight, turn on this layer, which has a mock image of a populated group workspace (with a menu and search criteria to the left, and the thumbnails panel on the right). This layer will NOT be part of your final graphic, and should be turned off when exporting.

NOTE: Informational layer. TURN OFF for output.

- **Background Color** – The bottom-most layer. Set to the color that will fill the remainder of the user's screen beyond the limits of the graphic.

NOTE: Set this layer to your desired background color, Layer should be visible when exporting graphic.

To create an Insight Background:

- 1) Place your graphic or image in the upper left corner.
- 2) Fade it to a SOLID background color that matches along the entire right and bottom edge. It is important that the ENTIRE bottom and right edge are this background color so it seamlessly blends in to the painted regions of the screen beyond the graphic. Photoshop has tools to assist you in fading your graphic image to the solid background color.

NOTE: If the fade isn't complete before hitting the edge, a line will be visible when the background color fills in around the edge of the graphic.

- 3) Place the title just above the horizontal line, close to the left edge of the right panel.

NOTE: The Guidelines layer shows where to place the title.

- a. Use the eyedropper tool to sample the solid background color at the bottom and right edges. Note the RGB value (Red, Green, Blue), you will need it in step #2 of *To Configure Custom Background for the Insight Java Client (if applicable)*.
- b. Turn off the Guidelines and File Menus layers.
- c. Save the final design as a GIF.

Creating a Browser Background from a Java Client Collection Background

Unlike the Insight Java Client, which places its elements in layers on the screen, BrowserInsight tiles graphical elements side-by-side. Since all graphical elements must be placed in rectangular regions, the Browser background needs to be sliced.



A Photoshop action script called **Insight Browser Background** has been developed to slice the background for you, requiring you only to save each slice as it is created. The script only needs to be imported once and may be used whenever you create or change an Insight background for the Insight Java Client and need to slice it for use in the browser.

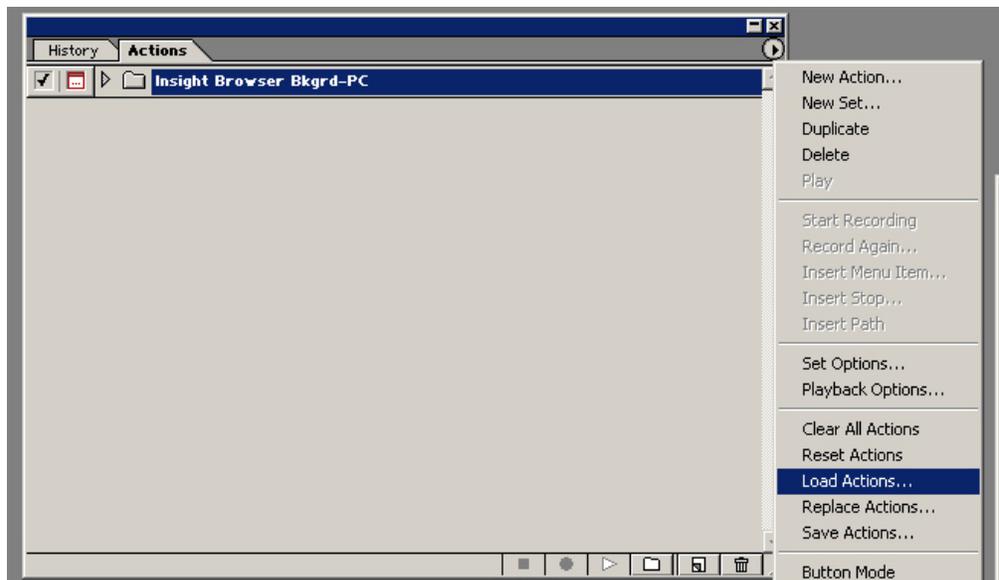
Steps to prepare and load the action script are different for PC and Mac users. Separate instructions follow for each environment. The action script runs identically in both environments, instructions converge at that point.

Installing the Insight Browser Background Action Script - PC Users

- 1) Locate the zip file containing the action script on either "5.1 Upgrade" or "Server Components" CD's:

`\utilities\browser_background\Insight_Browser_Bkgrd_PC.zip`

- 2) Unzip the contents into a temporary directory (eg: `c:\unzipped`).
- 3) Copy the `inf` directory from `c:\unzipped\Insight Browser Bkgrd-PC` to the root of your `c:\` drive.
- 4) Open Photoshop (version 6 or higher).
- 5) If the Action window is not already open, select **Window | Show Actions** from the menu.
- 6) Load the action:
 - a. Click  in the upper-right corner of the Actions window and select **Load Actions**.



- b. Navigate to the action and select it:

`c:\unzipped\Insight Browser Bkgrd-PC\Insight Browser Bkgrd-PC.atn`

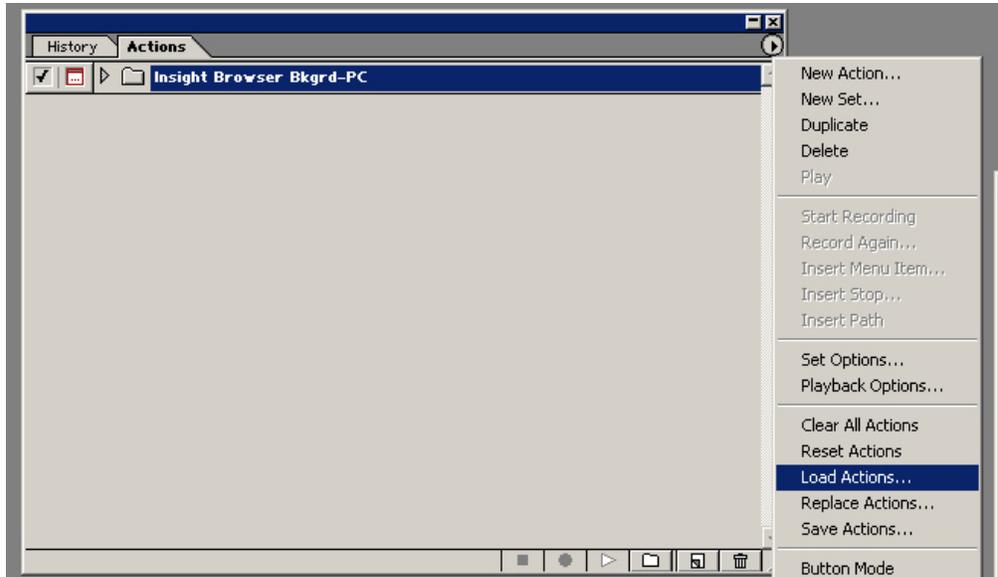
- c. *(Resume below at Running Insight Browser Background Action in Photoshop)*

Installing the Insight Browser Background Action Script - Mac Users

- 1) Locate the hqx file containing the action script on either "5.1 Upgrade" or "Server Components" CD's:

`\utilities\browser_background\Insight_Browser_Bkgrd_MAC.hqx`

- 2) Unstuff the contents into a temporary folder (eg: `\unzipped`).
- 3) Copy the `1nf` directory from `\unzipped\Insight Browser Bkgrd-MAC` to your desktop.
- 4) Open Photoshop (version 6 or higher).
- 5) If the Action window is not already open, select **Window | Show Actions** from the menu.
- 6) Load the action:
 - a. Click  in the upper-right corner of the Actions window and select **Load Actions**.



- b. Navigate to the action and select it:

`\unzipped\Insight Browser Bkgrd-PC\Insight Browser Bkgrd-MAC.atn`

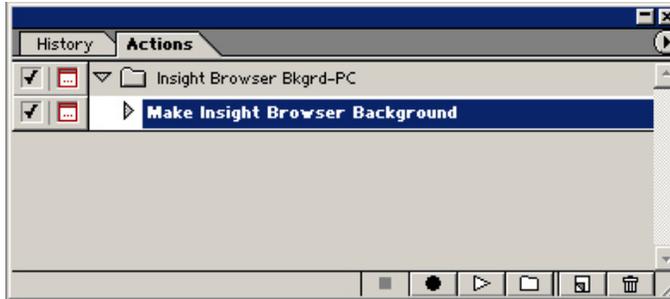
- c. (Resume below at Running Insight Browser Background Action in Photoshop)

Running Insight Browser Background Action in Photoshop

First-time users will already have Photoshop up and running with the Action window open from installing the action script (steps described above), but when returning to

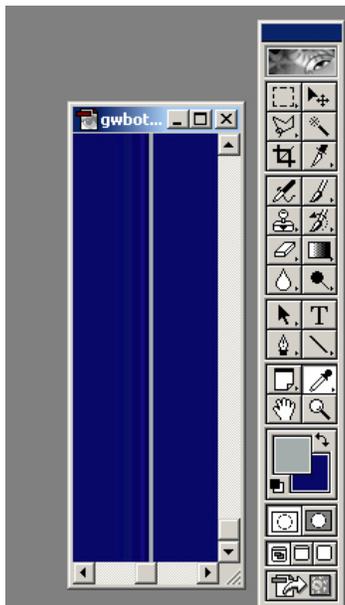
create a second background, the installation steps will not be necessary. For those users, follow the first two steps below.

- 1) Start Photoshop (version 6 or higher) if it is not already running.
- 2) If the Action window is not already open, select **Window | Show Actions** from the menu.
- 3) Run the **Insight Browser Background** action by clicking  at the bottom of the Action window. Follow the instructions.



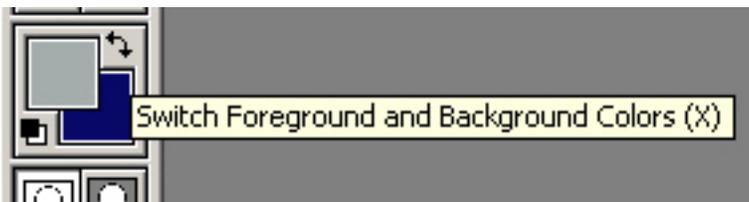
The foreground and background colors will be used to define graphics for the fill areas of the Insight screen beyond the graphic. Set the foreground color in Photoshop to the crosshair color, and the background color to the background color along the bottom and right edges of the graphic.

- 4) To set the foreground color, zoom in on the background until the cross hairs are clearly visible. Click on the foreground square in the Foreground/Background tool. The **Color Picker** window will appear and the cursor will turn into an eyedropper. Click on the crosshair line. The color in the **Color Picker** window will change to this color. Press **OK**. The foreground square in the foreground/background tool should now be the crosshair color.



- 5) To set the background color, click on the background square in the Foreground/Background tool. The **Color Picker** window will appear and the cursor will turn into an eyedropper. Click on the intended background color, which should be consistent across the bottom and right edges of the graphic. The color in the **Color Picker** window will change to this color. Press **OK**. The background square in the foreground/background tool should now be the crosshair color. Note the RGB value (Red, Green, Blue), you will need it in step #2 of *To Configure Custom Background for the Insight Java Client (if applicable)*.

If you find that you have the foreground and background color reversed, you can switch them by pressing the double-headed arrow in the Foreground/Background tool.



- 6) The script will begin slicing the background, and it will ask you where to store each slice. Navigate to and select the `inf` directory.

Moving Background Graphical Elements to the Media Manager

The Insight Java Client and BrowserInsight get their backgrounds from the Media Manager. The backgrounds need to be brought under the Media Manager.

Insight 5.1's **Collection Theme Tool** stores backgrounds in Collection-specific directories under:

```
<Media Manager installation directory>/media_manager/servlet/themes/
```

Moving Background Graphical Elements for the Insight Java Client and BrowserInsight

Move the `inf` directory (containing the browser background slices) into the `/themes/` directory, and rename it in a way that makes it easy to identify it with the Collection (Dalton_Inf, for example). Copy the background into this directory.

Testing Background Graphical Elements in Media Manager

The Insight Java Client and BrowserInsight access their backgrounds via the Internet. It is easy to test the background elements directly with a browser, both to verify that the graphic file was created properly and to verify its URL.

Build the Collection Background Base URL

Since all background elements reside in the same directory, once the URL is built for one element, only the filename portion needs to be changed to access another element. The Collection Background Base URL should be built per the example below:

```
http://library.Dalton.edu:8081/MediaManager/themes/Dalton_lnf/
```

made up of:

- **The Domain** – The server where Tomcat and Media Manager are installed. Use your domain.
- **The Tomcat Port** – The port in use by Tomcat (preceded by a colon ":"). Though by default, Port 8081 is used, if another application is using 8081, you may have had to install to another port.
- **The "/themes/" Path** – The Insight Collection Theme Tool builds backgrounds to this directory. You should, too.
- **Collection Level Directory** – The background folder created for this Collection under **Moving Background Graphical Elements to the Media Manager**.

Once the Collection Background Base URL is built, test each of the background elements by appending the following filenames in a browser.

Repeated below is the diagram of all browser background slices:



Test each of the following, and keep the URL for **Configuring the Collection for a Custom Background** (the next section):

For the Insight Java Client Background (if applicable):

- 1) <your Insight Java Client background name> Java Client Background

For Browser Background (if applicable):

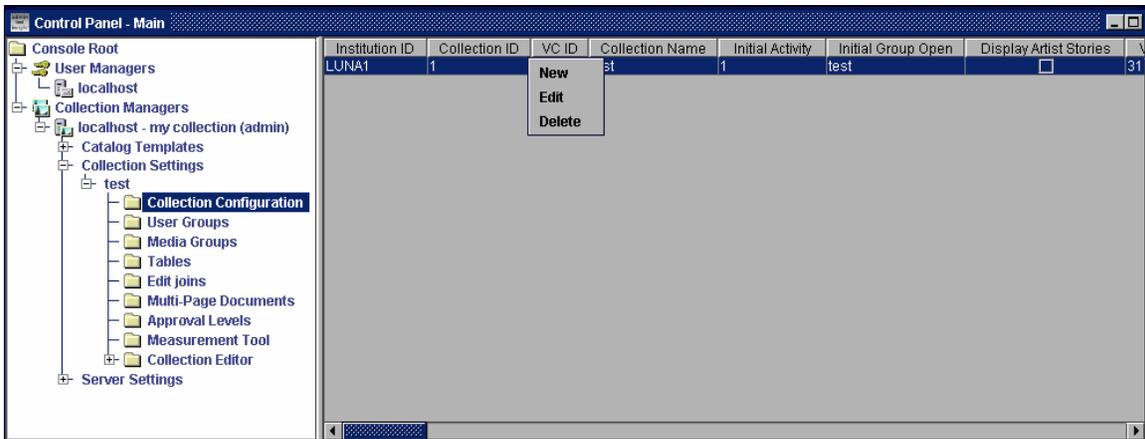
- 2) **gwtop_bg.jpg** GW Top Background
- 3) **menu_bg.jpg** Menu Background
- 4) **groupleft_bg.jpg** Group Left Background
- 5) **groupleft_bg_ns.jpg** Group Left Background NS (Netscape)
- 6) **gwbottom_bg.jpg** GW Bottom Background
- 7) **groupright_bg.jpg** Group Right Background

Configuring the Collection for a Custom Background

Collections will display in Insight with the standard default background unless configured to use a custom background instead. Now that the background has been designed, moved to the Media Manager and tested, it is ready to be configured into the Collection itself, using Insight Administrator Tools.

Finding the Collection's Configuration

- 1) Open Insight Administrator Tools.
- 2) Expand the **Collections** node.
- 3) Locate the desired Collection under the expanded **Collections** node.
- 4) Connect to the Collection:
 - Right-click it.
 - Select **Connect**.
 - Enter the Admin Username / Password.
- 5) Select the **Collection Configuration** node. A table of Collection Configurations will appear on the right. In most cases, it contains only one entry.
- 6) Open the Collection Configuration by either double-clicking it or:
 - Right-click it.
 - Select **Edit**.



The Collection Configuration window will pop up:

The screenshot shows a window titled 'test' with two main sections: 'Collection Information' and 'Collection Properties'.

Collection Information:

- Institution ID: LUNA1
- Collection ID: 1
- VC ID: NA
- Collection Name: test
- Short Description: (empty)
- Long Description URL: (empty)
- Copyright Statement: (empty)

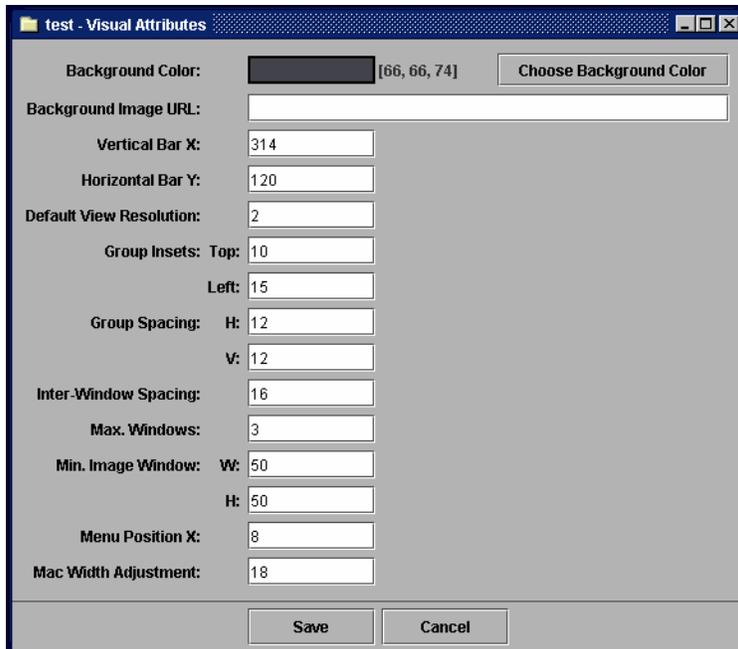
Collection Properties:

- Initial Activity: 1 - Search Menu
- Initial Group Open: test Read-Only
- Display Artist Stories:
- Large Thumbnail Threshold: 4
- Drag Speed Coefficient: 2
- Help Group: m/support/5_0/insight/en/index.html
- Help Image: m/support/5_0/insight/en/index.html
- Simultaneous IW Loads: 2
- Simultaneous GW Loads: 5
- Web Initiated JVA URL: (empty)
- Web Initiated JVA HTML Template: (empty)
- Thumbnail Cache Profile ID: 1
- Fast Scaling:
- Language Code: (empty)
- Country Code: (empty)
- Force collection name display:

Buttons at the bottom: Edit Visual Attributes, Edit Browser Attributes, Save, Cancel.

To Configure Custom Background for the Insight Java Client (if applicable)

- 1) Select **Edit Visual Attributes**. The **Visual Attributes** Window will pop up:



- 2) To set **Background Color**, press **Choose Background Color**. The **Choose Background Color** Window will pop up. Set the RGB value with the value you noted (when setting the background color in Photoshop). Press **OK**.
- 3) Set **Background Image URL** to the value tested in step 1 under **For the Insight Java Client Background (if applicable)** on page 204,
- 4) Press **Save** to save your changes.

To Configure Custom Background for BrowserInsight (if applicable)

- 1) Select **Edit Browser Attributes**. The **Browser Attributes** Window will pop up:

test - Browser Insight Attributes

Sort Fields: Contributor
Coverage
Creator
Level3

Thumbnail Fields: Contributor
Coverage
Creator
Level3

Remote Launch URL:

Remote Launch Image:

Loading Background:

Menu Background:

Progress On Background:

Progress Off Background:

Group Left Background:

Group Left NS Background:

Group Right Background:

GW Bottom Background:

GW Top Background:

Group Left HTML:

Browser Security:

Save Cancel

- 2) Set **Menu Background** to the URL tested in step 3 under **For Browser Background (if applicable)** on page 205,
- 3) Set **Group Left Background** to the URL tested in step 4 under **For Browser Background (if applicable)** on page 205,
- 4) Set **Group Left NS Background** to the URL tested in step 5 under **For Browser Background (if applicable)** on page 205,
- 5) Set **Group Right Background** to the URL tested in step 7 under **For Browser Background (if applicable)** on page 205,
- 6) Set **GW Bottom Background** to the URL tested in step 6 under **For Browser Background (if applicable)** on page 205,
- 7) Set **GW Top Background** to the URL tested in step 2 under **For Browser Background (if applicable)** on page 205,
- 8) Press **Save** to save browser custom background changes.

Testing the Collection and its Custom Backgrounds

Open the Collection using the Insight Java Client (if applicable). If it does not open with the new custom background, review your steps.

Open the Collection using BrowserInsight (if applicable). If it does not open with the new custom background, review your steps. Check that all slices are correct (it is not uncommon to have a few of the filenames reversed).

NOTE: The Background Image is required for Browser Insight to function.

Leveraging Insight's Interoperability Features to Create Reports, Dynamic Websites, Presentations, or Custom Applications

The Insight Application suite not only contains a dynamic Java Client and BrowserInsight interface, but also provides tools for interoperability between Insight and other applications. These tools include:

- HTML & PowerPoint Export in the Java Client
- Image & XML export in the Java Client
- Remote Launch Strings for the Java Client and BrowserInsight
- Reporting Tools for data on the Server
- The Insight XML Gateway

Ensuring Interoperability Features are Enabled for the Java Client

For many organizations, there is a balance between enabling the interoperability features in the Java Client and ensuring control and management of content within Insight. For good or ill, enabling these features opens the content within Insight to external applications and uses. This may present copyright or other issues. Please check your Institution's policy before enabling these features. Some of Insight's features even enable you to control the extent that users can access a specific feature (i.e. the specific size image a user can export).

Below is a list of features that users can leverage when using content from Insight on the web, in a presentation, or in more advanced situations. Depending on need and technical ability, different options are available:

- Export thumbnail or larger images with full XML data from the Java Client.
- Create Remote Launch Strings for a search in the Group Workspace from BrowserInsight or the Java Client.

- Create Remote Launch Strings for a set of images in the Group Workspace from BrowserInsight or the Java Client.
- Create Custom Remote Launch Strings by hand with more advanced features.
- Print images and data from the Insight Java Client.
- Export HTML web-pages with remote launch strings from the Java Client.
- Export Presentations created in the Java Client to HTML, Microsoft's PowerPoint, or Apple's Keynote.

NOTE: PowerPoint Export is only available on Windows; Keynote export is only available on Macintosh.

- Create a custom application with the Insight XML Gateway. For more information, see "Getting Started with the Insight XML Gateway."

Many of Insight's interoperability features are controlled in the Collection Manager's profiles. These profiles are linked to User Groups, and then to specific users (in the User Manager).

NOTE: To check a profile or change a specific permission, see Adjusting Profile Settings for a User in a Collection on page 176 for more information.

Using the Reporting Tools

In some cases, administrators may require database-level-access to their data; to generate reports and perform database maintenance. Insight 5.1 ships with a series of Views & stored procedures which support basic reporting functionality – i.e. transforming the data within the Insight Repository into a useable format for simple or complex queries.

Reports available:

Thumbnail Labels & Image Report: Provides access to the thumbnail labels and first four image sizes for any image within Insight.

Cataloging Templates: Provides a list of the cataloging data templates used within the Collection Manager, Records, the Field Groups, Fields, and other settings.

Collection Field Data: The Collection field data report provides access to all data within any/all collections in a collection manager on the field level. Users may query out data on a per-field / per-record basis.

Collection Data Structure: The Collection data structure report attempts to represent the entire collection's data structure as a single table, maintaining as much of the relational structure as is possible. The report will add additional rows to appropriately represent authorities or independent records.

NOTE: The Reporting Tools take advantage of **Stored Procedures & Views**; this functionality is not currently supported in MySQL 4.1.

Installing the Reporting Tools on a Collection Manager's Database

Installation of the Reporting Tools can be accomplished by running a SQL script to add the appropriate stored procedures / views.

NOTE: To Install the reporting tools, you must first have DBA / Administrative privileges, or specifically privileges to **create Views & Stored Procedures**.

Table 6: Locations for the Scripts to Install the Reporting Tools

Database	Location
MSSQL	/utilities/reports/50_Reports_Collection_MSSQL.sql
Oracle	/utilities/reports/50_Reports_Collection_Oracle.sql
MySQL	NOTE: MySQL 4.1 does not support Views or Stored Procedures and therefore cannot support the Reporting Tools at this time.

To Install the Reporting Tools:

- 1) Locate the Insight 5.1 or later Installation / Upgrade CD.
- 2) On the CD, open the utilities/reports Directory. (see "Table 6: Locations for the Scripts to Install the Reporting Tools" above)
- 3) Open a database script editor and connect to the Collection Manager or Personal Insight Manager database to which you wish to add the reporting tools.

Microsoft SQL

- SQL Query Analyzer or isql

Oracle

- SQLPlus or SQLPlus Worksheet

NOTE: To run the installation script you must have the Oracle "Resource" permission. This permission will only be required during the installation process and can be removed after the script has been run. This script creates both "Stored Procedures" and "Views" within the database.

- 4) Open the appropriate script for your database version.
- 5) Run the script.
- 6) Please report any errors to Luna Technical Support.

NOTE: If you are running more than one Collection Manager / Personal Insight Manager, you will have to add the reporting tools to each instance.

Configuring the Reporting Tools for a Collection

Some of the reporting tools, including the **Collection Data Structure Report**, require further configuration in order to be setup for a collection. As some of the reports represent the collection's data structure, if the structure changes, the report must be updated. To assist in the generation and re-generation of these reports, Luna has provided stored procedures to re-create the report's views.

IMPORTANT: You will need to **re-generate** the views any time you **modify a collection's data structure** or **create a new collection**. Due to the nature of the database's views however, they will automatically update as data within the collection is added, modified, or deleted.

Generating and Re-generating the Collection Data Structure Views

There are two steps to using the Reporting Tools for a Specific Collection, first, you must create the views for the collection; second, use a tool like Microsoft Excel or Crystal Reports, to extract the data.

To generate or re-generate the views:

- 1) Open a database script editor and connect to the Collection Manager or Personal Insight Manager database to which you wish to add the reporting tools.

Microsoft SQL

- SQL Query Analyzer or isql

Oracle

- SQLPlus or SQLPlus Worksheet

NOTE: To run the script you must have the Oracle "Resource" permission. This permission will only be required during the process and can be removed after the script has been run

- 2) Run the following command:

```
EXEC GENERATE_REPORT_VIEWS
```

NOTE: This command will work with both Microsoft SQL Server and Oracle.

- 3) The database views should now be created / re-created.

Accessing the Views created by the Reporting Tools

The views created by the reporting tools can be accessed via ODBC, JDBC, or other standard data access methods. Within queries, the views can be accessed as if they were tables.

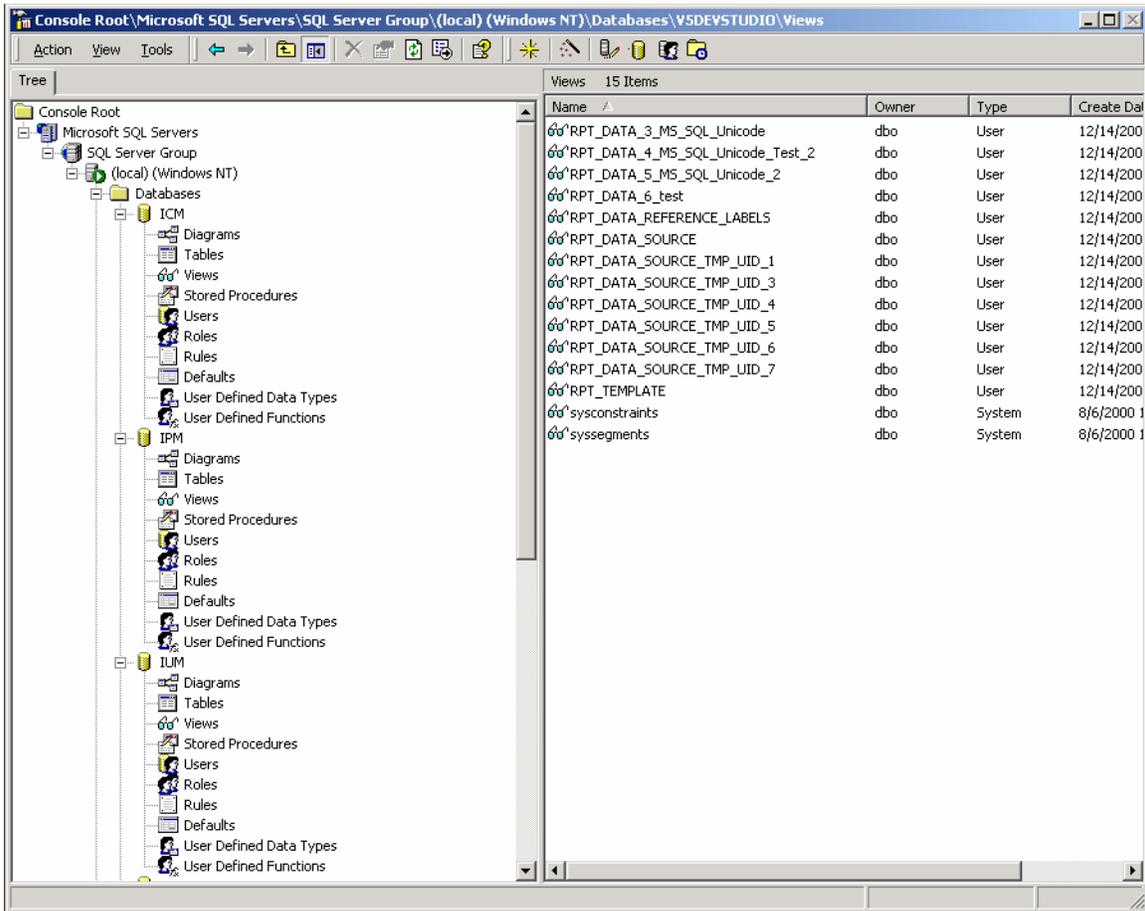
Accessing the views from Microsoft SQL Server Enterprise Console

To open the views in MSSQL Server's Enterprise Console, simply browse to the collection's database in the Enterprise console and select the "Views" tab from the tree.

Accessing the views from Oracle's Enterprise Manager

To open the views in Oracle's Enterprise Manager, simply browse to the collection's schema and open the "Views" tab.

Figure 31: Microsoft SQL Server Reporting Views



Accessing the Thumbnail Label & Image Report

The Thumbnail Label & Image Reports view presents all of thumbnail information for each of the collections as well as image URLs and display information.

To access the view simply run the following query:

```
SELECT * FROM RPT DATA THUMBNAIL LABELS
ORDER BY
    UniquecollectionID,
    ObjectID
```

UniquecollectionID	CollectionName	ObjectID	InaqeID	ReferenceLabel1	ReferenceLabel2	ReferenceLabel3	ReferenceLabel4	MediaURL0	MediaURL1	MediaURL2
8	Test Collection	280	100113	Attributed to Aisa	<NULL>	<NULL>	1	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	283	100115	Hans Arp	<NULL>	1950	2	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	286	100116	Giacomo Balla	1871-1958	1912	3	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	289	100111	Louis Comtois	1920-	1988	4	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	292	100114	Jacques Louis Davi	1748 - 1825	1817	5	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	294	100110	Egyptian, Probably	<NULL>	Third Intermediate	6	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	297	100117	Copy after Lorenzc	<NULL>	1480/1500	7	http://192.9.200.1	http://192.9.200.1	<NULL>
8	Test Collection	299	100118	Luca Giordano	1634 - 1705	ca. 1690	8	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	301	100119	<NULL>	<NULL>	1592	9	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	302	100120	<NULL>	<NULL>	1913	10	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	303	100121	<NULL>	<NULL>	1930	11	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1
8	Test Collection	306	100112	Attributed to Aisa	<NULL>	1955-1960	1	http://192.9.200.1	http://192.9.200.1	http://192.9.200.1

Limiting the query to a given collection:

```
SELECT * FROM RPT DATA THUMBNAIL LABELS WHERE
  CollectionName= '<collection_name>'
```

Simply replace <collection_name> with the name of your collection.

Accessing the Collection Template Report

The Collection Template Report lists field and data structure information for all of the collections in the database. This includes display preferences, data groupings, data standard, and other useful information.

To access the view simply run the following query:

```
SELECT * FROM RPT TEMPLATE
ORDER BY
  StandardID,
  EntityTypeDisplayOrder,
  FieldDisplayOrder,
  FieldID
```

StandardID	StandardName	Version	Version_Info	StandardDescription	IsPCTemplate	IsPublishedTemplate	EntityTypeDisplayN	EntityTypeDisplayC	FieldID	FieldDisplayName
8	Simple Labels	<NULL>	<NULL>	http://www.lunaim.0	0	1	Simple Labels	1	163	Description
8	Simple Labels	<NULL>	<NULL>	http://www.lunaim.0	0	1	Simple Labels	1	164	Identifier
8	Simple Labels	<NULL>	<NULL>	http://www.lunaim.0	0	1	Simple Labels	1	165	Date
8	Simple Labels	<NULL>	<NULL>	http://www.lunaim.0	0	1	Simple Labels	1	166	Title
8	Simple Labels	<NULL>	<NULL>	http://www.lunaim.0	0	1	Simple Labels	1	167	Creator
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Complex Labels	10	170	Description
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Complex Labels	10	171	Identifier
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Complex Labels	10	172	Date
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Complex Labels	10	173	Subject
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Complex Labels	10	174	Title
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Creators	30	175	Nationality
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Creators	30	176	Creator Dates
9	Complex Labels	<NULL>	<NULL>	<NULL>	0	1	Creators	30	177	Creator
12	Unicode Examples	<NULL>	<NULL>	<NULL>	0	1	Unicode Examples	10	179	Origin (English)
12	Unicode Examples	<NULL>	<NULL>	<NULL>	0	1	Unicode Examples	10	180	Name (Native)
12	Unicode Examples	<NULL>	<NULL>	<NULL>	0	1	Unicode Examples	10	181	Origin (Native)
12	Unicode Examples	<NULL>	<NULL>	<NULL>	0	1	Unicode Examples	10	182	Name (English)

Accessing the Field Data Report

The fielded data report allows users to query out specific fields from a collection and limit them

UniqueCollectionID	CollectionName	EntityID	EntityTypeDisplayN	EntityTypeID	EntityTypeDisplayC	RelEntityTypeID	Grouping	FieldID	FieldName	FieldDisplayName
8	Test Collection	299	Test Template	183	10	184	300	192	Creator	Creator
8	Test Collection	300	Creators	184	30	0	0	192	Creator	Creator
8	Test Collection	301	Test Template	183	10	0	0	186	Identifier	Identifier
8	Test Collection	301	Test Template	183	10	0	0	191	Title	Title
8	Test Collection	302	Test Template	183	10	0	0	186	Identifier	Identifier
8	Test Collection	302	Test Template	183	10	0	0	191	Title	Title
8	Test Collection	302	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	303	Test Template	183	10	0	0	186	Identifier	Identifier
8	Test Collection	283	Test Template	183	10	184	285	189	Nationality	Nationality
8	Test Collection	285	Creators	184	30	0	0	189	Nationality	Nationality
8	Test Collection	286	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	289	Test Template	183	10	0	0	186	Identifier	Identifier
8	Test Collection	289	Test Template	183	10	0	0	185	Description	Description
8	Test Collection	297	Test Template	183	10	184	298	192	Creator	Creator
8	Test Collection	298	Creators	184	30	0	0	192	Creator	Creator
8	Test Collection	304	Test Template	183	10	0	0	186	Identifier	Identifier
8	Test Collection	304	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	305	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	306	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	280	Test Template	183	10	0	0	191	Title	Title
8	Test Collection	306	Test Template	183	10	0	0	191	Title	Title
8	Test Collection	289	Test Template	183	10	184	290	192	Creator	Creator
8	Test Collection	290	Creators	184	30	0	0	192	Creator	Creator
8	Test Collection	292	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	294	Test Template	183	10	0	0	186	Identifier	Identifier
8	Test Collection	294	Test Template	183	10	184	295	189	Nationality	Nationality
8	Test Collection	295	Creators	184	30	0	0	189	Nationality	Nationality
8	Test Collection	299	Test Template	183	10	184	300	190	Creator_Dates	Creator Dates
8	Test Collection	300	Creators	184	30	0	0	190	Creator_Dates	Creator Dates
8	Test Collection	301	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	303	Test Template	183	10	0	0	191	Title	Title
8	Test Collection	305	Test Template	183	10	0	0	186	Identifier	Identifier
8	Test Collection	303	Test Template	183	10	0	0	187	Date	Date
8	Test Collection	304	Test Template	183	10	0	0	191	Title	Title
8	Test Collection	305	Test Template	183	10	0	0	191	Title	Title

To access the view simply run the following query:

```
SELECT * FROM RPT DATA SOURCE
ORDER BY
    UniqueCollectionID,
    EntityID,
    EntityTypeDisplayOrder,
    RelEntityTypeID,
    Grouping,
    FieldDisplayOrder,
    FieldID,
    ValueDisplayOrder
```

Where:

<ORDER BY ...>: orders and groups the results to maintain the inherent relationships in the data.

Some examples, limiting results to a given field, or record:

Limiting the results from the report to a given field

```
SELECT * FROM RPT DATA SOURCE WHERE EntityId IN
(
    SELECT EntityId FROM RPT DATA SOURCE WHERE
    FieldDisplayName='<field name>'
) AND CollectionName='<collection_name>'
AND ParentEntityTypeID=0
ORDER BY
    UniqueCollectionID,
    EntityID,
    EntityTypeDisplayOrder,
    RelEntityTypeID,
    Grouping,
    FieldDisplayOrder,
    FieldID,
    ValueDisplayOrder
```

Where:

<field_name>: is the name of the field you wish to limit the results to.

<collection_name>: is the name of the collection you wish to limit the results to.

parententitytypeid=0: specifies that the report should only include Object data.

<ORDER BY ...>: orders and groups the results to maintain the inherent relationships in the data.

```

SELECT * FROM RPT DATA SOURCE WHERE EntityId IN
(
  SELECT EntityId FROM RPT DATA SOURCE WHERE
    FieldDisplayName='<field name>' AND
    (
      ValueText='<value1>'
      OR ValueText='<value2>'
    )
) AND CollectionName='<collection name>'
AND ParentEntityTypeId=0
ORDER BY
  UniqueCollectionID,
  EntityID,
  EntityTypeDisplayOrder,
  RelEntityTypeID,
  Grouping,
  FieldDisplayOrder,
  FieldID,
  ValueDisplayOrder

```

Where:

<field_name>: is the name of the field you wish to limit the results to.

<collection_name>: is the name of the collection you wish to limit the results to.

<value1>: is a value you wish the result to match.

<value2>: is another value you wish the result to match.

parententitytypeid=0: specifies that the report should only include Object data.

<ORDER BY ...>: orders and groups the results to maintain the inherent relationships in the data.

A more complex example:

The example below uses the VRA Model and is intended to extract label text. The first section of the query selects the field and value information. The sub-select limits the results to that of one object in Insight. The "and" limits the results further to a specific set of fields, and finally the "order by" groups the results to maintain data integrity.

```

SELECT EntityTypeID as Insight Record ID, FieldDisplayName,
ValueText, ValueNumber FROM RPT DATA SOURCE WHERE EntityID IN
(
  SELECT EntityID FROM RPT DATA SOURCE WHERE
  FieldDisplayName = 'Work Record ID' AND
  ValueText = '110820'
)
AND
(
  FieldDisplayName = 'Creator Name' OR
  FieldDisplayName = 'Title' OR
  FieldDisplayName = 'Display Date' OR
  FieldDisplayName = 'Work Record ID'
)
AND ParentEntityTypeID=0
ORDER BY
  UniqueCollectionID,
  EntityID,
  EntityTypeDisplayOrder,
  RelEntityTypeID,
  Grouping,
  FieldDisplayOrder,
  FieldID,
  ValueDisplayOrder

```

Accessing the Collection Data Structure Report

Unlike many of the other reports, the Collection Data Structure Report models the view created to the data structure of the collection. Because of this dependency, if the data structure changes, the stored procedure will need to be created.

Also, each of the collections has its own view. The views are named as follows:

```
RPT_DATA_ + <UNIQUE_COLLECTION_ID> + _ + <COLLECTION_NAME>
```

Where:

<UNIQUE_COLLECTION_ID> is the unique ID # for the collection in the database
 <COLLECTION_NAME> is the name of the collection.

To access the view simply run the following query:

```

SELECT * FROM RPT DATA <UNIQUE COLLECTION ID> <COLLECTION NAME>
ORDER BY
  EntityTypeID,
  EntityID

```

Where:

<UNIQUE_COLLECTION_ID> is the unique ID # for the collection in the database
 <COLLECTION_NAME> is the name of the collection.

UniqueCollectionID	CollectionName	EntityTypeID	EntityTypeDisplay	IsPreferredEntity	EntityID	Grouping	Identifier	Nationality	Creator Dates	Creator	Title	Date
8	Test Collection	183	Test Template	1	280	0	1	<NULL>	<NULL>	<NULL>	Hunter with Walrus	<NULL>
8	Test Collection	183	Test Template	1	280	281	<NULL>	Inuit	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	283	0	2	<NULL>	<NULL>	<NULL>	Figure mythique	1950
8	Test Collection	183	Test Template	1	283	284	<NULL>	French	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	283	285	<NULL>	Français	<NULL>	Hans Arp	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	286	0	3	<NULL>	<NULL>	<NULL>	Dynamism of a Dog	1912
8	Test Collection	183	Test Template	1	286	287	<NULL>	Italian	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	286	288	<NULL>		1871-1958	Giacomo Balla	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	289	0	4	<NULL>	<NULL>	<NULL>	Cadences de lumière	1988
8	Test Collection	183	Test Template	1	289	290	<NULL>	Canadian	1920-	Attributed to Aisa	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	289	291	<NULL>	<NULL>	<NULL>	Louis Comtois	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	292	0	5	<NULL>	<NULL>	<NULL>	Cupid and Psyche	1817
8	Test Collection	183	Test Template	1	292	284	<NULL>	French	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	292	293	<NULL>	<NULL>	1748 - 1825	Jacques Louis Davi	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	294	0	6	<NULL>	<NULL>	<NULL>	Mummy Case of Pa	Third Interme
8	Test Collection	183	Test Template	1	294	295	<NULL>	Egyptian	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	294	296	<NULL>	<NULL>	<NULL>	Egyptian, Probabl	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	297	0	7	<NULL>	<NULL>	<NULL>	Madonna and Child	1480/1500
8	Test Collection	183	Test Template	1	297	287	<NULL>	Italian	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	297	298	<NULL>	<NULL>	<NULL>	Copy after Lorenz	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	299	0	8	<NULL>	<NULL>	<NULL>	The Battle between	ca. 1690
8	Test Collection	183	Test Template	1	299	287	<NULL>	Italian	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	299	300	<NULL>	<NULL>	1634 - 1705	Luca Giordano	<NULL>	<NULL>
8	Test Collection	183	Test Template	1	301	0	9	<NULL>	<NULL>	<NULL>	Les sept vices ou p	1592
8	Test Collection	183	Test Template	1	302	0	10	<NULL>	<NULL>	<NULL>	The South Ledges,	1913
8	Test Collection	183	Test Template	1	303	0	11	<NULL>	<NULL>	<NULL>	Early Sunday Morni	1930
8	Test Collection	183	Test Template	1	304	0	12	<NULL>	<NULL>	<NULL>	Artist's ledger - Bo	1907-1962
8	Test Collection	183	Test Template	1	305	0	13	<NULL>	<NULL>	<NULL>	Shrine Head	12th century
8	Test Collection	183	Test Template	1	306	0	1	<NULL>	<NULL>	<NULL>	Hunter with Walrus	1955-1960
8	Test Collection	183	Test Template	1	306	281	<NULL>	Inuit	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	184	Creators	0	281	0	<NULL>	Inuit	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	184	Creators	0	284	0	<NULL>	French	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	184	Creators	0	285	0	<NULL>	Français	<NULL>	Hans Arp	<NULL>	<NULL>
8	Test Collection	184	Creators	0	287	0	<NULL>	Italian	<NULL>	<NULL>	<NULL>	<NULL>
8	Test Collection	184	Creators	0	288	0	<NULL>	<NULL>	1871-1968	Giacomo Balla	<NULL>	<NULL>
8	Test Collection	184	Creators	0	290	0	<NULL>	Canadian	1920-	Attributed to Aisa	<NULL>	<NULL>
8	Test Collection	184	Creators	0	291	0	<NULL>	<NULL>	<NULL>	Louis Comtois	<NULL>	<NULL>
8	Test Collection	184	Creators	0	293	0	<NULL>	<NULL>	1748 - 1825	Jacques Louis Davi	<NULL>	<NULL>

NOTE: If there are repeating field grouping, for example a creator record with a creator birth / death date and other information, repeating information would be displayed in a second row of data.

Taking Advantage of the Insight XML Gateway

The Insight XML Gateway provides a platform for the creation of custom applications, plug-ins and other tools which take advantage of content within Insight. The Gateway is a Web-Services interface for Insight.

For more information on the Insight XML Gateway, please see the XML Gateway Documentation.

Using Remote Launch Strings

Remote Launch Strings are URLs which link to Insight. These URLs can perform various tasks, including opening a Collection in BrowserInsight or the Java Client, performing a search, and opening an image or set of images in the Image Workspace. The simplest way to create remote launch strings is through the Java or Browser Clients.

In the following section, we will provide several examples of Remote Launch Strings and break them down to identify the individual components. These strings can be static or dynamically generated, depending on your needs.

NOTE: If you haven't purchased Deploy Director, you can still enable the Java Client to create Remote Launch Strings by using your Remote Launch String for BrowserInsight. Instead of launching the Java Client, it will simply launch BrowserInsight instead.

Enabling Remote Launch String creation in BrowserInsight

Remote Launch Strings are a combination of servlet URL and parameters to the servlet. BrowserInsight dynamically builds Remote Launch Strings by interpreting the current environment into servlet parameters and appending them to the URL. Insight Studio should pre-configure the Remote Launch Base URL for you using the configuration value in the InsightServer.dat. The following section is provided as a reference, if you need to adjust the configuration specifically for one collection. Should you want to change the default for future collections, edit the InsightServer.dat for your Collection or Personal Insight Manager.

The URL (explained below in ***Constructing a Base URL***) must be configured into the Collection by using the Insight Administrator Tools:

1. Open Insight Administrator Tools.
2. Connect to the Collection:
 - Expand the **Collections** node in the tree on the left.
 - Right-click the desired Collection, which will cause a context-menu to pop up.
 - Select **Connect** from the context-menu, and enter the Administrator Username and Password.

The Collection node should now expand.

3. Open the Collection's Configuration:
 - Select **Collection Configuration** from the expanded Collection tree on the left. The right pane should reveal a table of Collection Configurations (for most Collections, there is only one entry).
 - Select the desired Collection Configuration and either double-click it, or:
 - Right-click the desired Collection Configuration, which will cause a context-menu to pop up.
 - Select **Edit** from the context-menu.

The **Collection Configuration** Window should then pop up.

4. Press the **Edit Browser Attributes** button at the bottom of the Screen.
5. Set **Remote Launch String** to the Base URL as defined below in ***Constructing a Base URL***. Be aware that EITHER Java or Browser version of the Base URL can be placed here.
6. Press the **Save** button.

Enabling Remote Launch String creation in the Java Client

For collections created in Insight 5.1, the base URL of a remote launch string should be automatically setup for you. The following instructions are for customizing this value. Insight Studio should pre-configure the Remote Launch Base URL for you using the configuration value in the InsightServer.dat. The following section is provided as a reference, if you need to adjust the configuration specifically for one

collection. Should you want to change the default for future collections, edit the InsightServer.dat for your Collection or Personal Insight Manager. The URL (explained below in ***Constructing a Base URL***) must be configured into the Collection by using the Insight Administrator Tools.

1. Open Insight Administrator Tools.
2. Connect to the Collection:
 - Expand the **Collections** node in the tree on the left.
 - Right-click the desired Collection, which will cause a context-menu to pop up.
 - Select **Connect** from the context-menu, and enter the Administrator Username and Password.

The Collection node should now expand.

3. Open the Collection's Configuration:
 - Select **Collection Configuration** from the expanded Collection tree on the left. The right pane should reveal a table of Collection Configurations (for most Collections, there is only one entry).
 - Select the desired Collection Configuration and either double-click it, or:
 - Right-click the desired Collection Configuration, which will cause a context-menu to pop up.
 - Select **Edit** from the context-menu.

The **Collection Configuration** Window should then pop up.

4. Set **Web Initiated Insight JVA URL** to the Base URL as defined below in ***Constructing a Base URL***. Though the prompt explicitly asks for the Insight Java Client URL, in fact either the Insight Java Client or Browser version of the Base URL can be placed here.
5. Press the **Save** button.

Creating a Custom Remote Launch String

Creating custom Remote Launch Strings may enable you to dynamically create links to Insight from other applications.

Remote launch strings contain the following components:

- a base URL (which points to BrowserInsight or DeployDirector).
- a Collection to open.
- Which components to open (Group Workspace, Image Workspace, or Both).
- A search to perform in the Group Workspace (if it is opened).
- A specific page of images to return (i.e. if you want to open the 5th page in a search result set).
- A specific image or set of images to open.

Constructing a Base URL

The base URL for a remote launch string is the URL for BrowserInsight or DeployDirector:

An example of a base URL for BrowserInsight:

<http://library.Dalton.edu:8080/BrowserInsight/BrowserInsight?cmd=start>

An example of a base URL for the Insight Java Client (using Deploy Director):

<http://library.Dalton.edu:8080/servlet/deploy/insight/launch?cmd=start>

Required Parameters for all Remote Launch Strings

When Insight generates a remote launch string for you, it begins with the **Base Request URL**, and appends the following parameters:

- **Cid (Collection Unique ID)**

This is the combination of the Collection ID, Institution ID, and Virtual Collection ID for your Collection. To confirm these values, check the User Manager.

NOTE: in pre-5.x versions of Insight, the CID referenced the BrowserUniqueCID as specified in the User Manager and the BrowserInsight.conf. The BrowserUniqueCID is still supported in 5.1, but Insight will always create 5.1 remote launch strings which use the CID as described above.

- **iia (insight initial activity)**

Any of the following:

0	Open Group Window
1	Open Image Workspace
2	Open Both Group Window and Image Workspace

Making a Request Based on a Search

Beginning with the Base Request URL and the required parameters, requests for a remote launch that dynamically retrieves all qualifying entries based on search criteria may look like this:

```
http://library.Dalton.edu:8080/BrowserInsight/BrowserInsight/?cmd=sta
rt&cid=LUNA-123-
NA&iia=0&iia=0&ig=The%20Dalton%20Library&isl=0&gwisp=0|Period|Period|
1|Ming|1&gwia=3&gc=0
```

where:

- **cid=LUNA-123-NA&iia=0** – In this example, the Collection referred to by the LUNA-123-NA **cid** (Collection unique ID, made up of Collection ID of LUNA, Institution ID of 123 and no Virtual Collection ID (NA)) will be opened in the Group Workspace (**iia=0**)
- **ig=The%20Dalton%20Library** – Referring to “image group,” **ig** indicates which media group in the Collection to open. Since quotes aren’t used, “%20” is used in place of “ ” (%20 is the hex value for a space character). If **ig** is

omitted, the default group contained in the Collection configuration will be used.

- **gwhsp=0|Period|Period|1|Neolithic|1** – **gwhsp** defines the search parameters. Simple requests will contain one set of search criteria composed of six parameters (described below), complex searches can contain several sets of criteria back to back, delimited by "|".

Every set of criteria will consist of the following six positional parameters. Unlike keyword parameters, positional parameters are not identified by keyword, and must appear in a specific order:

Bool | Fieldname | FieldDisplayName | FieldType | FieldValue | Relation

- Bool** – Referring to “Boolean operator,” **Bool** indicates how this set of criteria is to be combined with the preceding set (ignored in the first set, set to **0**):

0	OR – include results if EITHER this set of criteria or its predecessor are true
1	AND – include results if BOTH this set of criteria and its predecessor are true

- FieldName** – The database column name to be searched.
- FieldDisplayName** – The name to be displayed in the data window.
- FieldType** – Specifies the data type of the **FieldValue** that follows. Though fields in a database have a specific data type, database queries can be made using either numeric or string operands, which is determined by the use of quotes. Since quotes are not allowed in remote launch strings, **FieldType** tells the server how to format **FieldValue** into the query, and must be one of:

1	Text
2	Number

- FieldValue** – This is the value you are searching for. Remember that since quotes are not allowed, “%20” is used in place of “ ” (%20 is the hex value for a space character).

- Relation** – **Relation** defines how the **FieldValue** is to be evaluated.

1	EQUALS
2	CONTAINS
3	BEGINS
4	ENDS
5	GREATER
6	LESS
9	DOES NOT CONTAIN

To perform a complex Boolean search, concatenate multiple sets of the above criteria into one string, separated by "|".

The example below contains two sets of criteria, searching for a "SubjectType" = "Painting" AND an "EarlyDate" (numeric) > 1900.

```
gwispl=0 | SubjectType | Category | 1 | Painting | 1 | 1 | EarlyDate | Early%20Date
| 2 | 1900 | 5
```

- **gwia=3** – **gwia** or "Group Window Initial Activity" has three options:

0	Do nothing (merely open the group workspace)
1	Show search menu
3	Custom search

Since this is a search request, set **gwia=3**.

- **gc=0** – **gc** controls paging. BrowserInsight displays 20 objects per page, the Insight Java Client displays 50. Starting at 0, **gc=#** will display the page holding the #th object. For example, **gc=73** would cause BrowserInsight to display the 4th page, the Java client to show the 2nd page.

Making a Request for a set of Specific Images in the Group Workspace:

The two requests detailed below are based on ImageID and ObjectID. These are internal numbers that identify a specific Image and the relating descriptive information for that image. Together they form a unique call for a referenced record.

NOTE: The first portion of these strings is consistent with what has been described previously, so we will just focus on the portions that are different.

```
http://library.Dalton.edu:8080/BrowserInsight/BrowserInsight?cmd=star
t&cid=5&iia=0&ig=The%20Dalton%20Library&isl=0&gwispl=0 | ImageID | ImageID
| 2 | 101854:3013 | 1 | 0 | ImageID | ImageID | 2 | 101842:301 | 1 | 0 | ImageID | ImageID | 2
| 101843:302 | 1&gwia=3&gc=-1
```

The main difference in this string has to do with the **gwispl** parameter. Notice that there is a special keyword ImageID used for the **Fieldname** and **FieldDisplayName** sections. It is also identified as a numeric field. The **FieldValue** section there is 101854:3013 , which is the ObjectID:ImageID reference for the record

Opening an Image in the Image Workspace

To open an image or set of images in the Image Workspace, you must specify an initial activity of opening the Image Workspace, and provide pairs of ObjectID's and ImageID's to open in Insight. (Remember that a specific item in Insight is identified by an ObjectID, which references the data record and an ImageID, which references the specific media file). Optionally, you may specify an initial resolution size.

```
http://library.Dalton.edu:8080/BrowserInsight/BrowserInsight?cmd=star  
t&cid=5&iia=1&ig=The%20Dalton%20Library&isl=0&ir=3013+301+302&id=1018  
54+101842+101843&iwas=2
```

When requesting images to open in the Image Workspace, some of the parameters are different:

- **ir=3013+301+302** – Meaning “Image Reference,” **ir** is a list of ImageIDs, separated by a plus sign.
- **id=101854+101842+101843** – ObjectIDs are the heart of Insight. **id** is a list of ObjectIDs, separated by a plus sign. **id** and **ir** must be in sync in order to get the correct result. The first ImageID must correlate to the first Object ID, and so on.
- **iwas=2** – Referring to “Image Workspace Aspect Size,” **iwas** is the requested image size. For a list of Image sizes, please see Table 14: Image Sizes In Insight on page 239.

Creating a Remote Launch String with auto-login

The following two optional parameters are available to auto-login – providing a default Username and password. When provided (and validated by the User Manager), the remotely launched Insight application will automatically log in and bring the user straight to the images/objects of interest.

These parameters are generally provided as a pair or omitted:

- **un=MyUsername** – Referring to “User Name,” **un** is an Insight user name for auto-login.
- **pw=MyPassword** – Referring to “Password,” **pw** is an Insight password corresponding to the user-name provided above (parameter **un**), used for auto-login.

Special Remote Launch Parameters for the Insight Java Client

Since the Insight Java Client does not use **cid** (Collection Unique ID – defined for BrowserInsight) and since it performs its own authentication against a User Manager, Deploy Director remote launch strings need to identify Collections and User Manager differently:

- **u=insightusermanager.dalton.org** – Referring to “User Manager” (not to be confused with **un** for auto-login User Name), **u** specifies the address of the User Manager that will authenticate access and map the request to a Collection Manager.

Special Remote Launch Parameters for BrowserInsight

Currently, there is only one special parameter for BrowserInsight, which allows you to control whether users can create remote launch strings or not:

- **isl** indicates whether or not the user of the remote launch has the right to create remote launch strings in BrowserInsight.

0	NO
1	YES

Tuning Image Processing Application Memory for Insight Studio and Administrator Tools

Insight Studio and the Insight Administrator Tools have been optimized to support the most common image file size, 20-30 megabyte uncompressed files. If you encounter an error during the processing of an image that has an uncompressed file size greater than 30 megabytes, you may need to allocate more memory.

By default, 130 megabytes have been allocated to Insight Studio and the Insight Administrator Tools. This will support most situations. However you can allocate more memory to accommodate larger images. The general rule is to quadruple the uncompressed file size to determine how much memory should be allocated.

Both Insight Studio and the Insight Administrator Tools will use all the memory you allocate to it, so be sure the memory you give it is real memory. If you have a system that has 256mb of free memory and you grant 512mb, both applications will process an 80mb file without error but the system will be very slow.

The following chart will help you in identifying your new memory settings.

Table 7: Suggested Memory Allocations for Insight Studio and the Insight Administrator Tools

Original Uncompressed File Size	Suggested Memory Allocation	Setting in bytes
50mb	200mb	209715200
100mb	400mb	419430400
200mb	800mb	838860800

To adjust your memory allocation:

- 4) Locate the directory where Insight Studio or the Insight Administrator Tools is installed.

5) Open the "Insight Studio 5.1.lax" file or the "Insight Administrator Tools 5.1.lax" file using a text editor (notepad on windows).

6) In the file locate the following line.

```
lax.nl.java.option.java.heap.size.max=
```

7) You will see a number following this parameter.

8) Change the number to the appropriate size in bytes as shown in the previous table.

9) Save the file.

10) Restart Insight Studio or the Insight Administrator Tools.

Advanced Settings for the Insight JPEG2000 Encoder in Insight Studio and the Insight Administrative Tools

The settings for Insight's JPEG2000 encoder can be adjusted or tuned by changing different settings within a configuration file. Changing these settings will affect how the JPEG2000 file is created and the quality of the information encoded within the file. **By default**, Luna uses a “**visually lossless**” setting which preserves the quality of the image at a 1:1 ratio between the original and the JPEG2000. This, however, can be adjusted. One commonly requested option is to enable “lossless-compression” which, beyond being “visually lossless” ensures that all data is preserved.

Changing the JPEG2000 Compression Settings for the Insight Administrator Tools or Insight Studio

It is possible to change the settings for the Insight Administrator Tools and Insight Studio to use custom compression. It is **STRONGLY** advised that you are consistent with these settings across all versions of Insight Studio and the Insight Administrative Tools.

Locating the Sample JPEG2000 Compression Settings File

A sample JPEG2000 compression configuration file **InsightJPEG2Compression.dat** can be located on the **Insight 5.1 Server Components** or **Insight 5.1 Upgrade** CDs (in the **utilities/cmd_line_jp2k_encode/your platform/**).

Configuring the Compression File for “Lossless Compression”

To configure the JPEG2000 Encoder for lossless compression:

- 1) Open the **InsightJPEG2Compression.dat** configuration file in a Text Editor
- 2) Locate the line containing the following:

```
slope = 51651,51337,51186,50804,50548,50232
```

- 3) Set the **slope** to **0**.

```
slope = 0
```

- 4) Locate the line containing the following:

```
Clayers = 6
```

- 5) Set the **Clayers** to **1**.

```
Clayers = 1
```

- 6) Save the file and close it.

NOTE: To **restore** the JPEG2000 compressions settings to the **defaults:** **remove** the **InsightJPEG2Compression.dat** file.

Installing the JPEG2000 Compression Settings File

Once you have configured the JPEG2000 compression settings, you must copy the configuration file to the Installation Directory for Insight Studio or the Insight Administrator Tools.

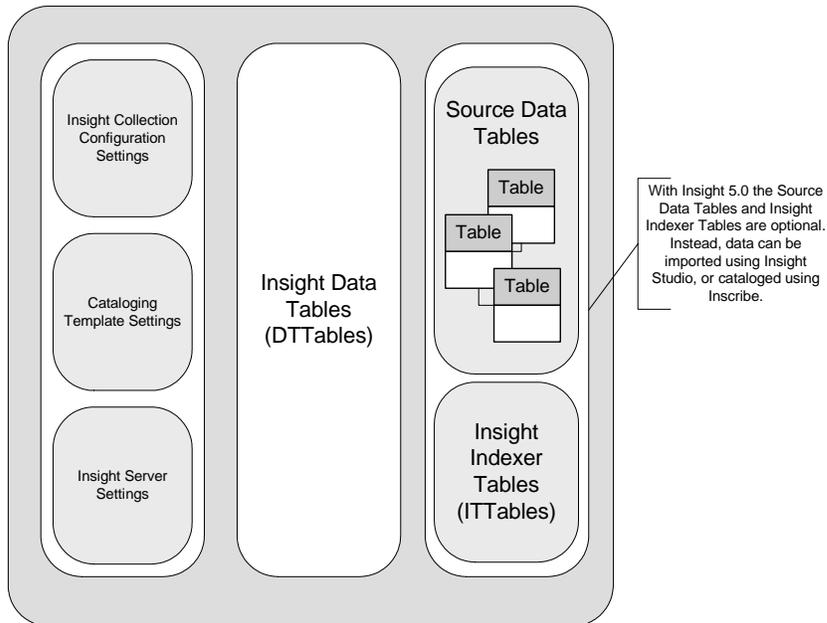
To install the JPEG2000 Compression Settings File:

- 1) Locate the Installation directory for the Insight Administrator Tools or Insight Studio
- 2) Copy the modified version of the JPEG2000 Compression Settings file (**InsightJPEG2Compression.dat**) to the installation directory
- 3) Restart Insight Studio or the Insight Administrator Tools respectively.

Insight's Database Table Structure

Insight contains five main data table types:

- 1) Server Settings – contain settings for the server instance as opposed to the collection, like Media File Locations (SPS).
- 2) Cataloging Template Settings – contain definitions for each of the cataloging templates, including schema, field, and table properties.
- 3) Collection Settings – contain specific settings for collections such as background images, names, descriptions, etc.
- 4) Data Tables – contain the data for each collection once imported / indexed into Insight .
- 5) Indexer Tables – (optional) if used, data is drawn from the source tables using the indexer, and restructured for storage in the Insight Data Tables.

Figure 32: Basic Diagram of the Insight Table Structure

Indexer & Source Tables

In pre-5.x versions of Insight, there was a dependency on a set of source data tables to provide content for Insight. These source data tables, in the form of a relational database schema, were mapped and defined as a Cataloging Template using Fields, Record Types, Record Relationships and Joins. The Joins represent the relationships between the source data tables and enable the import of data into the Insight Data Tables via the Insight Indexer. The Record Types, Record Relationships, and Fields defined the data schema within Insight.

The basic indexing process was as follows:

- 1) Administrators would create the source data tables (or use those packaged with the VRA) within the Insight Administrator Tools.
- 2) Administrators would import data into the source data tables.
- 3) Administrators would then run the Insight Indexer, which moves data from the source data tables into the Insight Indexer Tables (ITT Tables above).
- 4) Once the Indexing process was complete, the Indexer moves data from the Insight Indexer Tables into the Insight Data Tables.

Once this process was complete, the data imported using the indexer would be available within Insight.

Inscribe, Insight Studio, and the Indexer

Insight 5.x removes the requirement of source data tables now that Insight Studio provides data import tools to easily move content into any Insight Collection. The

optional removal of data tables provides added flexibility as well as simpler management and collection creation for administrators. Both the source-table write-back and standard indexing methods are still supported for collections in 5.x, but are alternate configurations. When Cataloging Templates are created in Insight Studio, table-based Joins are optional. In place of the Indexer, Inscribe provides a method to add new records or make minor adjustments. Insight Studio enables bulk-import of data using the Data Import Module.

The data import process is as follows:

- 1) Catalogers add data via Inscribe, or collection administrators add data via Insight Studio
- 2) Data is processed in the Collection Manager and written to the Insight Data Tables

Tables

Table 8: Insight Field Types

Field Type	Description
Short Text Fields	Text fields are the most common field type in Insight. Short Text is the default field type in Insight.
Long Text Fields	Long text fields may contain up to 4000 characters and are preconfigured to make the best use of the data window to display the text.
Numeric Fields	Numeric fields may include positive or negative values, but require a valid number.
Date Fields	Date Fields are simply text fields with Fuzzy Date Validation logic enabled – ensuring that the data entered into the field conforms to a valid date format.

Table 9: Inscribe Validation Types

Validation Type	Description
Required	User must enter a value into the field before they can save.
Numeric Range	User must enter a number between a specified minimum and maximum value.
Valid Fuzzy Date	User may enter a textual or numeric date or date range, but it must conform to the fuzzy date specification.

Table 10: Valid Date Formats

Use numeric date formats	1782 January 5, 1914 7/4/1776
Use familiar date vocabulary	11th century ad first millennium
Add modifiers to dates	2000 bc 450 ad 740 bce
Construct date ranges using a dash	1900 - 1940 450 bc - 750 ad

Table 11: Default properties for Insight Field Types

Option	Short Text	Long Text	Numeric	Date	Unique ID
Data Type	Text	Text	Numeric	Text	Text
Suggested Length	255	4000	4	100	100
<i>NOTE: Suggested Lengths are provided for reference when configuring source-table write-back</i>					
Allow Repeating	NO	NO	NO	NO	NO
<i>NOTE: You can set a field to repeat within the Insight Administrator Tools</i>					
Required Field?	NO	NO	NO	NO	YES
Enforce Unique?	NO	NO	NO	NO	YES
Use Fuzzy Dates	NO	NO	NO	YES	NO
Index Keywords?	YES	YES	YES	YES	YES
Select List Behavior	Auto-list w/ list all	First letter w/ list all	Auto-list w/ list all	Auto-list w/ list all	Auto-list w/ list all
Thumb Option?	YES	NO	YES	YES	YES
Sort Option?	YES	NO	YES	YES	YES
Display in Data?	YES	YES	YES	YES	YES
Data Window Display Options	Wrap to center	Wrap to left	Wrap to center	Wrap to center	Wrap to center
Delimiter Type	Repeat Field Name	Repeat Field Name	Repeat Field Name	Repeat Field Name	Repeat Field Name

Table 12: Record Display and Data Properties

	Object Record	Independent Records	Dependent Records	Controlled Vocabularies
Displayed in it's own Form	YES	YES	NO	YES
Maintains Unique values	?	YES	NO	YES
Duplicates values	?	NO	YES	NO
Folded into parent form	NO	NO	YES	YES
Contains more than one field	YES	YES	YES	NO
Can have nested elements	YES	YES	YES*	NO
* but only a controlled vocabulary				

Figure 33: Mapping of permissions from the User Manager to Collection Manager

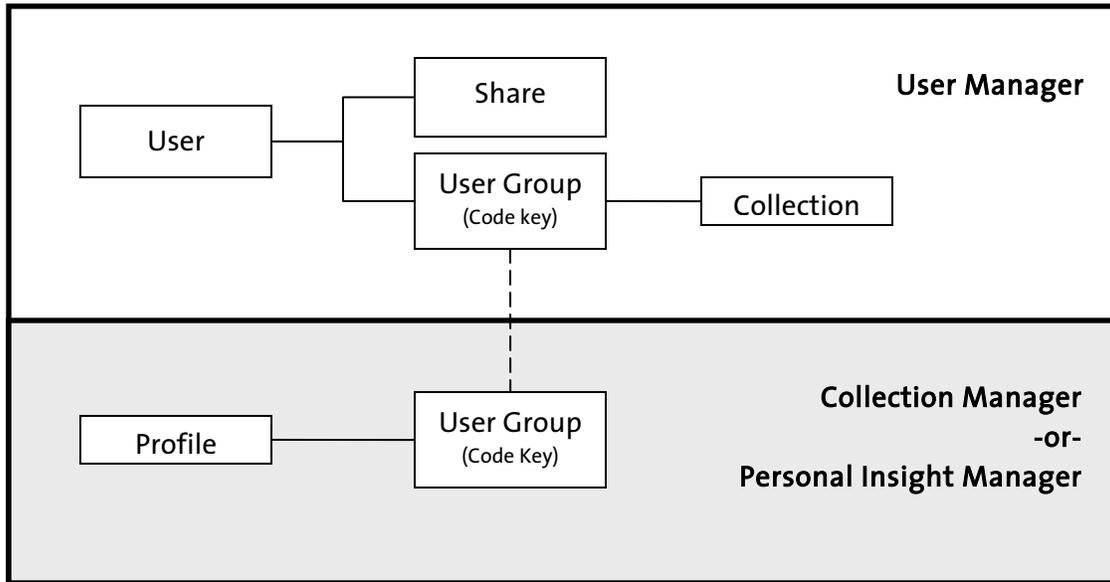


Table 13: Image and Multimedia formats supported by Insight

Supported Image Types		
BMP	GIF	JPEG
TIFF	TIFF (with LZW)	RAW
PGM	PNG	
NOTE: Only 8-Bit Images are currently supported		
Supported Multimedia Types		
AIFF (.aiff)	MIDI (.mid)	QuickTime (continued)
8-bit mono/stereo linear	Type 1 & 2 MIDI	Video: JPEG (420, 422, 444)
16-bit mono/stereo linear	MPEG-1 Video (.mpg)	Video: RGB
G.711 (U-law)	Multiplexed System stream	Sun Audio (.au)
A-law	Video-only stream	8 bits mono/stereo linear
IMA4 ADPCM	MPEG Layer II Audio (.mp2)	16 bits mono/stereo linear
AVI (.avi)	MPEG layer 1, 2 audio	G.711 (U-law)
Audio: 8-bit mono/stereo linear	QuickTime (.mov)	A-law
Audio: 16-bit mono/stereo linear	Audio: 8 bits mono/stereo linear	Wave (.wav)
Audio: DVI ADPCM compressed	Audio: 16 bits mono/stereo linear	8-bit mono/stereo linear
Audio: G.711 (U-law)	Audio: G.711 (U-law)	16-bit mono/stereo linear
Audio: A-law	Audio: A-law	G.711 (U-law)
Audio: GSM mono	Audio: GSM mono	A-law
Video: Cinepak	Audio: IMA4 ADPCM	GSM mono
Video: MJPEG (422)	Video: Cinepak	DVI ADPCM
Video: RGB	Video: H.261	MS ADPCM
Video: YUV	Video: H.263	
Flash (.fla)		

Table 14: Image Sizes In Insight

Insight Size	Dimensions
Size 0	- up to 96 pixels on the long side
Size 1	- up to 192 pixels on the long side
Size 2	- up to 384 pixels on the long side
Size 3	- up to 768 pixels on the long side
Size 4	- up to 1536 pixels on the long side
Size 5	- up to 3072 pixels on the long side
Size 6	- up to 6144 pixels on the long side
Size 7	- up to 12288 pixels on the long side
Size 8	- up to 24576 pixels on the long side

Table 15: Default Collection Settings for Collections Built with Insight Studio

Property	Configured automatically in Insight Studio	NOTES
Background Image	YES	
Background Color	YES	
Browser Background Image	YES	
Insight Java Client Remote Launch URL	YES	Configured from Default in InsightServer.dat, can be changed manually in the Administrator Tools
Browser Remote Launch URL	YES	Configured from Default in InsightServer.dat, can be changed manually in the Administrator Tools
Quick Search Fields	YES	
Data Model	YES	
Setup for Indexer	NO	Can be configured in the Administrator Tools
Collection Name	YES	
Collection URL	YES	

Table 16: Default Profiles for Collections and Associated Permissions

Privilege	Admin	Editor	Cataloger	General	Restricted
Save Groups	YES	YES	NO	NO	NO
Delete Groups	YES	YES	NO	NO	NO
Max Image Export	<24576 pixels	<24576 pixels	<24576 pixels	<3072 pixels	<96 pixels
Max Presentation Export Screen Resolution	1600 x 1200	1600 x 1200	1600 x 1200	1280 x 960	None
Export HTML	YES	YES	YES	YES	NO
Edit Annotations & Links	YES	YES	NO	NO	NO
Edit Multi-View Images	YES	YES	NO	NO	NO
Edit Multi-Page Documents	YES	YES	NO	NO	NO
Inscribe Specific Privileges					
Approval Level	6	5	4	0	0
Read	YES	YES	YES	NO	NO
Write	YES	YES	YES	NO	NO
Delete	YES	YES	YES	NO	NO
Map Between Records	YES	YES	YES	NO	NO
Map Records to Media	YES	YES	YES	NO	NO
NOTE: When a user has multiple collections open in the Insight Java Client, the more restrictive permission for each privilege ALWAYS takes precedence.					

Table 17: Personal Insight Manager Default Profile Privileges

Privilege	Admin	PC Creator	General	Restricted
Save Groups	YES	YES	NO	NO
Delete Groups	YES	YES	NO	NO
Max Image Export	<24576 pixels	<24576 pixels	<3072 pixels	<96 pixels
Max Presentation Export Screen Resolution	1600 x 1200	1600 x 1200	1280 x 960	None
Export HTML	YES	YES	YES	NO
Edit Annotations & Links	YES	YES	NO	NO
Edit Multi-View Images	YES	YES	NO	NO
Edit Multi-Page Documents	YES	YES	NO	NO
Edit Personal Collections	YES	YES	NO	NO

Table 18: Differences between Personal Collections and Full Collections

Task	Personal Collection	Full Collections
Can use Inscribe	NO	YES
BrowserInsight Access	YES	YES
XML Gateway Access	NO	YES
Can import data	NO	YES
Can use external data sources	NO	YES
can use controlled vocabularies	NO	YES
can have complex cataloging templates	NO	YES
Can use Wavelet Files	NO	YES

Table 19: Differences between the Administrator Tools, Inscribe, and Insight Studio

Tasks	Admin Tools	Insight Studio	Inscribe
Create Collections	NO	YES	NO
Create Cataloging Templates	NO	YES	NO
Bulk Import Data from Text Files	NO	YES	NO
Bulk Import Data from Data Tables (indexer)	YES	NO	NO
create new data records (manual)	NO	NO	YES
modify existing records (manual)	NO	NO	YES
Process Media			
Create JPEG2000 Files	YES	YES	NO
Create MrSID Files	YES	NO	NO
Map Objects to Media (manual)	YES	NO	YES
Map Objects to Media (bulk)	YES	YES	NO
Upload Media to Media Manager	NO	YES	NO
Other			
Modify Collection Properties	YES	YES	NO
Modify Cataloging Templates	YES	NO	NO
update thumbnail caches (soft-restart)	YES	NO	NO

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