SmartPlant Fusion

Getting Started Guide



PROCESS, POWER & MARINE

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Preface

This guide introduces you to the basics of SmartPlant® Fusion to help get you started.

SmartPlant Fusion Product Documentation

SmartPlant Fusion documentation is available as Help and as Adobe® PDF files. To view printable guides for SmartPlant Fusion, click **Help > Printable Guides** in the software.

Intergraph gives its customers permission to print as many copies of the delivered PDF files as they need for their non-commercial use. Do not print the PDF files for resale or redistribution.

Installation and Overviews

- SmartPlant Fusion Release Bulletin Provides information on the SmartPlant Fusion features for the current release.
- SmartPlant Fusion Installation and Configuration Guide Provides installation, set up, and configuration information. It also provides information about troubleshooting the software.
- SmartPlant Fusion Getting Started Guide Provides overview information to help users start working in SmartPlant Fusion.

Administrative Guide

 SmartPlant Fusion Administrator's Guide - Provides information such as general conceptual information, procedures, and vocabulary necessary to use the SmartPlant Fusion Data Capture Administration module.

User's Guides

- SmartPlant Fusion Reviewer's Guide Provides information such as general conceptual information, procedures, and vocabulary necessary for the reviewer to use the SmartPlant Fusion Quality Control module.
- SmartPlant Fusion Document Controller's Guide Provides information such as general
 conceptual information, procedures, and vocabulary necessary for the document controller
 to use the SmartPlant Fusion commands available in the SmartPlant Foundation Desktop
 Client and SmartPlant Fusion Data Capture Task Manager module.
- SmartPlant Fusion Viewer's Guide Provides information such as general conceptual information, procedures, and vocabulary necessary for the viewer to use the SmartPlant Fusion commands and functionality available in the SmartPlant Fusion Data Capture Task Manager module, SmartPlant Fusion Web Portal and SmartPlant Foundation Desktop Client.
- SmartPlant Fusion Pre-Processor Utility Guide Provides information such as general
 conceptual information, procedures, and vocabulary necessary for the administrator and
 document controller to use the SmartPlant Fusion commands available in the SmartPlant
 Fusion Pre-Processor Utilities module.

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For the latest support information for this product, use a World Wide Web browser to connect to http://support.intergraph.com (http://support.intergraph.com). Also, you can submit any documentation comments or suggestions you might have on the Intergraph support site.

SECTION 1

Introduction to SmartPlant Fusion

SmartPlant Fusion is a powerful way to organize, link, and view unstructured and unmanaged data. Using SmartPlant Fusion, you can:

- Capture and index unstructured data
- Create a digital version of a plant
- Search, navigate, and view your plant's data.

Capture and index unstructured data

Most plants today have information collected over the years from different sources and in many different formats. Plants might have unorganized PDFs, multiple copies of the same document, or boxes full of paper files and drawings.

Most companies have a document management system in place. However, if people send files in emails, copy files to an external drive for an on-site visit, or print a copy of a file to mark it up by hand, the data becomes unmanaged and unstructured.

SmartPlant Fusion can capture and index your company's unstructured data, organizing the files in a single location. Files can be marked as current, and old files are archived.

Create a digital version of a plant

SmartPlant Fusion provides a single point of access to all of your engineering information with links to the original documents. Using SmartPlant Fusion, you can load all files into a single system and extract important information (like tags and other relationships). The files are also related to organization items such as document types, disciplines, and tag types. All information is linked, which helps the user easily navigate the system.

Search, navigate, and view your plant's data

After you load and process documents in SmartPlant Fusion, you can:

- Search for documents and view their properties
- Search for tags and view their properties
- Navigate between tags and related documents
- Select a tag and view it in the file from which it was extracted
- Open files in their native application
- View thumbnails of a file

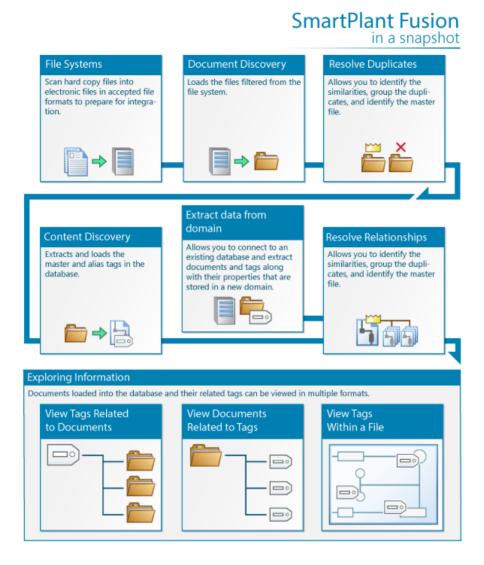
SmartPlant Fusion users

Users and their roles are specific to each company that uses the software. The SmartPlant Fusion security model controls access to the software and its functionality. For more information, see *Users and Roles* in the *SmartPlant Fusion Administrator*'s *Guide*.

The following table details the different kinds of users in SmartPlant Fusion:

User Type	Default User Name	Details
Administrator	FusionAdministrator	Manages and organizes the SmartPlant Fusion system. The administrator is responsible for the system's central settings, data reader patterns, document discovery patterns, document naming system, tag classification, tag discovery patterns, tag lists, and tag naming system.
Document Controller	FusionDocController	Creates and manages document discovery tasks, which load files into the SmartPlant Fusion database.
Document Reviewer	FusionReviewer	Views and reviews files. The reviewer identifies the master file from duplicate files attached to the document. The reviewer can also correct any relationships, resolve reference flies, and delete any orphan tags.
Viewer	FusionViewer	Reviews, browses, navigates, and views data in a SmartPlant Fusion system. The Viewer can also run and view reports about data.

SmartPlant Fusion in a snapshot



File Systems

Information in file systems might be unstructured and consist of files that are not linked or hotspotted; files might even be paper files that are not in electronic format. Information collected over the years could be from various sources, in a variety of formats, exist in different versions of software, or might have inconsistent file names or unknown versions.

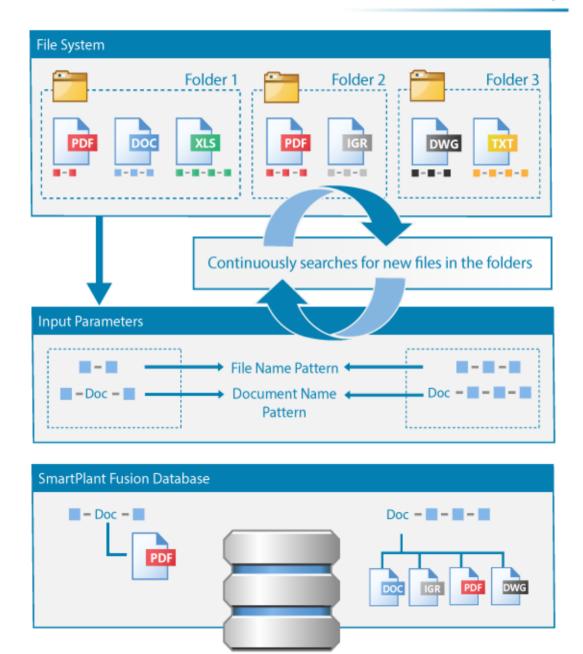
Files in a file system must be sorted and captured in a single place to work with SmartPlant Fusion. Paper copies of documents must be scanned and be made available in the file system. Companies that have a legacy document management system can connect to SmartPlant Fusion, so the software can discover the data available.

Document Discovery

During Document Discovery, SmartPlant Fusion tasks crawl folders in a file system – folder structures are examined; file names and directories are analyzed and selected; structure and thumbnails are established. When documents match specific criteria, the files are loaded in the

SmartPlant Fusion database. The original file in the company's file system is preserved and not touched.

Document Discovery



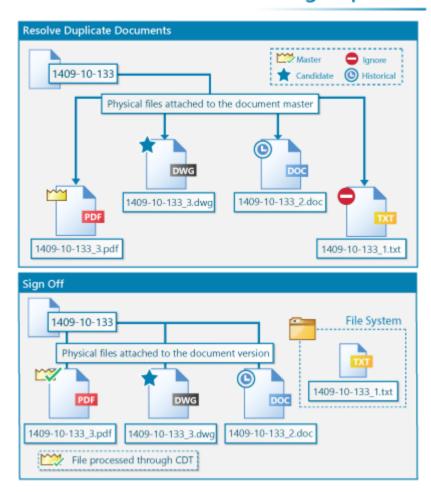
Resolve Duplicates

The file system may contain several copies of the same file. The files might have different file extensions, or they might be located in different folders. More than one file with the same name could also exist. After the Document Discovery Task runs, a document might be related to more than one file.

You must identify a master file to resolve any duplication. Once the master file is identified, you can keep the other duplicate files for reference or delete them from the database. You can assign the following statuses to a file:

Status	Details
Unknown	The file status is not set. This is the default status for the files when duplicates are found.
Master	The file is the latest and is selected for content and tag extraction.
Candidate	This file is the latest, but it is excluded from content and tag extraction.
Historical	This file is an older version that needs to be stored in the database for future reference.
Ignore	This file is an older version that is not needed for reference, and it can be stored at a physical location outside the application.

Resolving Duplicates



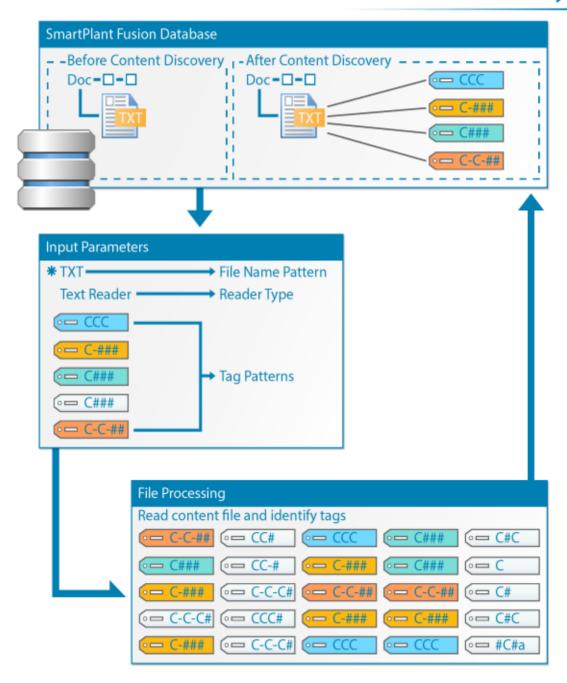
Content Discovery

The Content Discovery process extracts the master and alias tags using pattern matching. During the content discovery process, the file properties are set as document properties.

A reader processes the document attributes and properties of a master file, then converts these properties into relationships and meaningful properties. The type of file determines the reader used for content extraction. Most file types that have pre-processed content files can also be processed in the content discovery phase.

A processed document is related to organizational items and master and alias tags that are extracted from the content file.

Content Discovery



Extract Data from Domain

You can connect to an existing database and domain to extract documents and tags (and their properties). Domains segregate the data in the database for both performance and data integrity.

If a domain object name matches the SmartPlant Fusion object name, the domain object is related to the SmartPlant Fusion object. If the domain object does not match a SmartPlant Fusion object name, a SmartPlant Fusion object is created with the same name and is related to the domain object.

You can compare the properties of tags to identify any inconsistencies and make changes.

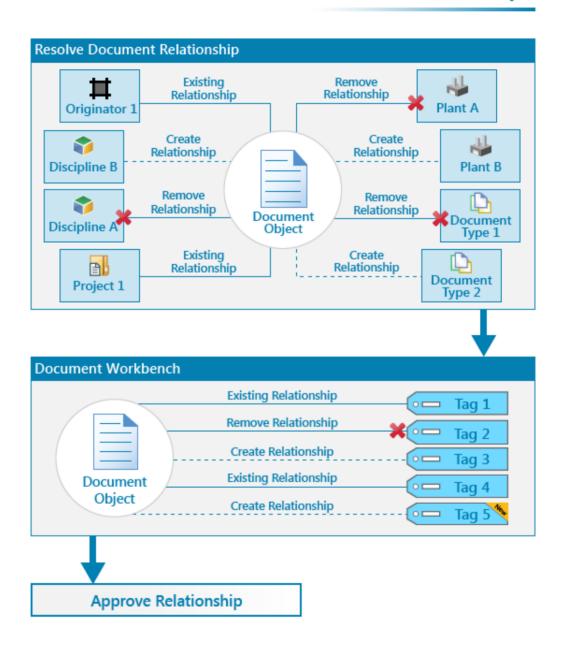
Resolve Relationships

When documents are successfully processed with the content discovery task, they are related to the existing objects in the database.

You can search for the processed documents and modify their relationships with the existing objects in the database. During Content Discovery, some of the tags might not be extracted from

the content files. You can review the master files attached to the document, and you can add and delete the tags related to the document.

Resolve Relationships



Exploring Information

After all data is loaded and created, you can search and view the following:

- Documents created during the document discovery phase
- Files attached to the document and the file properties
- Master and alias tags created during the content discovery phase
- Master tags, their properties, and any related alias tags
- Alias tags, their properties, and any related master tags

You can also view reports to identify inconsistencies between the property values of the SmartPlant Fusion tags and the domain tags.

SECTION 2

Terms and acronyms

Here are some key terms and acronyms that are used often in SmartPlant Fusion.

Terms

Term	Meaning
Alias Tag	A tag that is named differently, but represents the master tag in the system. For example, an engineer or sub-contractor names a tag by adding "/" to the name instead of "-" (for example, P/100 instead of P-100). These tags can be extracted using SmartPlant Fusion and are always related to a master tag that follows the SmartPlant Fusion naming convention.
Document Naming System	Allows you to define the parts of a file name. You can identify the part names of a file and relate them to existing objects in the database. A document naming system item is defined for each file part and document part in the Document Discovery Pattern module.
Domain Tag	A tag that is stored in an allocated domain that represents the data extracted from a document or database. These tags are extracted from an existing database. They are used for the inconsistency report to compare data extracted from the different SmartPlant Fusion data sources.
Duplicate Document	A document with multiple files attached to it. Multiple files are attached when different files with the same name but of different types or multiple versions of the same document are found in the file system.
File Name Parts	Sections that represent data in a file name. Often files are named so that different parts of the file name have different meanings, for example the first 2 characters may represent the unit that the document has been drawn for. The first 2 characters in this example are a file name part.
File Properties or Attributes	Values that are stored on the file object and finally transferred to the document if the file is selected for data extraction.
Hotspotting	Hyperlinks in a document on the area where the tag exists in the file. These hyperlinks allow you to navigate from the tag to the file and zoom into that area in the file.

Term	Meaning
Master File	The file that is used for data and content extraction.
Master Tag	Extracted tags that follow a set of standard naming conventions in a project or a plant.
Tag Naming System	Allows you to define the parts of a tag name. You can identify the part names of a tag and relate them to existing objects in the database. A tag naming system item is identified for each tag part in the Tag Discovery Pattern module.
Thumbnail	A small size image representation of a larger file. It is usually intended to make it easier and faster to look at large files for managing them.

Acronyms

Acronym	Meaning
CDT	Content Discovery Task
DDP	Document Discovery Pattern
DDT	Document Discovery Task
DNS	Document Naming System
DRP	Data Reader Pattern
DDDT	Database Domain Discovery Task
PBS	Plant Breakdown Structure
TDP	Tag Discovery Pattern
TNS	Tag Naming System

SECTION 3

Getting started

SmartPlant Fusions provides a hands-on way for you to get started in your new system with sample data. You can create and set up a new site with sample data, then you can use the sample data to learn the basics of the SmartPlant Fusion software.

Using the sample project will help you get familiar with the software, and it might give you ideas about how to best approach your own project.

To use the sample data, the following software must be installed and configured first. For more information and specific version numbers, see the *SmartPlant Fusion Installation and Configuration Guide*.

- SmartPlant Foundation
- TruView Integrator for SPE/SPO
- SmartPlant Markup Plus
- SmartSketch

Set up a project with sample data

First, you can create and configure a site using the database that is delivered with SmartPlant Fusion. Then, load the sample data for your site. The sample data includes organizational items, documents discovery patterns, and more—everything you might need to get started in a new SmartPlant Fusion system.

Set up a site for sample data

IMPORTANT The sample data delivered with SmartPlant Fusion can affect a production system. Intergraph recommends that you create a site and project specifically to load and use the sample data.

- Using SmartPlant Foundation Server Manager, create a site for the sample data using the SPFNMIN.dmp file from the SmartPlant Fusion installation folder.
- 2. Configure the new SmartPlant Fusion site.
- Set up the SmartPlant Fusion database to use a database reader pattern. Type the
 database user name, password, and the tablespace name used to create the site when you
 load the database scripts.
- 4. Configure the site for TruView Integrator.
 - When you configure your site for TruView Integrator, click **Yes** in the **Do you want to copy Sample Data?** dialog box to load extra sample files that you can use to explore laser scan documents with SmartPlant Fusion. For more information, see *Use Leica TruView in the SmartPlant Foundation Desktop Client* (on page 30).
- 5. Run SmartPlant Fusion Diagnostics in SmartPlant Foundation Server Manager for the new site to confirm that all software is configured correctly.

For more information, see the SmartPlant Fusion Installation and Configuration Guide.

Set your active scope

Before you can get started in SmartPlant Fusion, set the active scope to your sample data project.

- 1. Log on to SmartPlant Fusion as FusionAdministrator.
- 2. Click SmartPlant Foundation Client.
- 3. Click File > Set Active Scope.
- 4. To set your scope by query, select **Set active scope by query**, then select **PlantA** in the **Query Scope** list.
- 5. To set your create scope, select the **PlantA** in the **Create Scope** list.
- 6. Click OK.

Load the sample data for your site

- 1. Open SmartPlant Foundation Desktop Client as FusionAdministrator.
- 2. Click **File** > **Loader**, and load the Product_SPFN_SampleData.xmlldr file from the following location: [drive]:\SmartPlant Foundation 2016 Server Files\Web_Sites\[[site name] \SampleData\Sample Project Setup.

MOTE You must regenerate the sample data when configuring a new plant. To regenerate the sample data, rename the plant name in the existing XLSM files located at [drive]: \SmartPlant Foundation 2016 Server Files\Web_Sites\SPFusionServer\SampleData\Sample Project Setup folder, and click Generate Load file to generate the XML files. After you have generated the XML files, load them using the SmartPlant Foundation Loader.

- Using the Loader, load the following files from the SampleData\Map Files folder:
 - LF-Documents.xml
 - LF-Drawings.xml
 - LF-Drawings2.xml
 - LF-Drawings3.xml
 - LF-DupData.xml
 - LF-LaserScan.xml
 - LF-3DModels.xml

For more information on loading files, see *Loader* in the *SmartPlant Foundation Desktop Client User's Guide*.

TIP To view the sample data you loaded, log out of SmartPlant Fusion, and then log on to SmartPlant Desktop Client as FusionAdministrator. You will see additional icons in the **Tree** view.

Create a document discovery patterns group

As part of setting up your sample data, you must set up a document discovery pattern group, which includes one or more document discovery patterns.

- 1. Log on to SmartPlant Fusion as FusionAdministrator.
- 2. Click Data Capture Administration > Document Discovery Patterns.
- 3. Click Create Document Discovery Pattern , and click the Group Document Discovery Pattern tab.
- 4. Type a name and description for the document patterns group. For example, you can name it *All Drawings* with a description of *Load Drawings*.
- 5. Select the following map files from the **Document discovery patterns** list:
 - ExampleMapFile-Drawings
 - ExampleMapFile-Drawings2
 - ExampleMapFile-Drawings3
- 6. Click Save.

Use the sample data to explore SmartPlant Fusion

After you set up your sample data site, you can start to explore SmartPlant Fusion. The following topics walk you through how to load documents, resolve duplicate files, load and use a document index, extract tags, and change the classification of a document. You can also learn how to view data.

Start the SmartPlant Fusion scheduler

You must start the SmartPlant Fusion scheduler before the document discovery task starts and documents are loaded into your system.

- 1. Find the SmartPlant Fusion scheduler by clicking **Find > Administration > Schedulers**. The scheduler name is *FusionScheduler*.
- 2. Right-click the scheduler, and click **Scheduler > Start**.

Load documents into the SmartPlant Fusion database

When you create and run a document discovery task, the documents are loaded into the SmartPlant Fusion database.

Create and run a document discovery task to load documents

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the **Document Discovery Tasks** page, click **Create Document Discovery Tasks**



5. Select a document discovery pattern from the list.

Using the sample data, you can select **ExampleMapFile-Documents**.

IP If you want to see the documents that will be loaded with any document discovery task, click the document discovery pattern to launch an Excel report. Click the FilesCanBeLoaded tab to see a list of files.

- 6. Click OK.
- 7. Click **Refresh** to view the progress. When the task is 100% complete, click the **Documents** tab to view the documents that were loaded into SmartPlant Fusion.

Create and run a document discovery task to load drawings

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the **Document Discovery Tasks** page, click **Create Document Discovery Tasks** 🛣.



- 5. Select a document discovery pattern from the list. Using the sample data, you can select **All Drawings**.
- 6. Click OK.
- 7. Click **Refresh** to view the progress. When the task is 100% complete, click the **Documents** tab to view the documents that were loaded into SmartPlant Fusion.

Using the sample data, this document discovery task loads 10 files from the file system, even though there are 11 files. Two of the files are mapped to the same document, becoming a duplicate document. For more information, see Resolve duplicate documents (on page 23).

Create and run a document discovery task to load files with the same name

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the **Document Discovery Tasks** page, click **Create Document Discovery Tasks** 🛣.



- 5. Select a document discovery pattern from the list. Using the sample data, you can select **ExampleMapFile-DupData**.
- 6. Click OK.
- 7. Click Refresh to view the progress. When the task is 100% complete, click the Documents tab to view the documents that were loaded into SmartPlant Fusion.

Using the sample data, this document discovery task loads six files from the file system and attaches all six files to a single document, which results in a duplicate document. For more information, see Resolve duplicate documents (on page 23).

Find loaded documents and drawings

- 1. Log on to SmartPlant Fusion as FusionViewer.
- 2. Click Data Capture Task Manager.
- Click Documents.
- 4. Click **Search Documents** to view the documents.

Using the sample data, thumbnails for 14 documents appear.

Resolve duplicate documents

If a document discovery task loaded two or more files from the file system that have the same document name, a duplicate document is created with more than one file attached to it. A reviewer must review the files attached to the duplicate document and identify the master file.

Possible statuses for files include the following:

Status	Details
Unknown	The file status is not set. This is the default status for the files when duplicates are found.
Master	The file is the latest and is selected for content and tag extraction.
Candidate	This file is the latest, but it is excluded from content and tag extraction.
Historical	This file is an older version that needs to be stored in the database for future reference.

Status	Details
	This file is an older version that is not needed for reference, and it can be stored at a physical location outside the application.

If you ran the document discovery task using the ExampleMapFile-DupData document discovery pattern, the document 1409-10-144 has duplicate files. For more information, see *Create and run a document discovery task to load files with the same name* (on page 23).

View and compare duplicate files

- 1. Log on to SmartPlant Fusion as FusionReviewer.
- 2. Click Fusion Quality Control.
- 3. Click Resolve Duplicates.
- 4. In the **Duplicate Documents** pane, select the document that has duplicate files. Using the sample data, select **1409-10-144**.
- 5. Click **Group Files** to compare each file with the other files in the set.
 - If a file matches exactly with any of the other files in the set, the file is stamped with a number, such as 01. If the file does not match with any other file, it is stamped as **Unique**.
 - In the sample data set, both of the 1409-10-144_2.pdf files are identical, and both are stamped as Group 01.
- 6. Click a document hyperlink to open the document.

View the file location and revision schemes for files

In some cases, the file location or revision scheme of the file might be enough information to help you set a status.

In the sample data, notice that there are several files with the name 1409-10-144_2 and 1409-10-144_3. The suffixes "_2" and "_3" indicates a revision. "_3" is a later revision than "_2". Mark the1409-10-144_1.pdf file and one of the 1409-10-144_2.pdf files as **Historical**. The other file with the same name is automatically set to **Ignore**.

If you mark a document with the **Ignore** status, you must specify where you want the file stored. For more information, see *Specify a file location to store files with the Ignore status* (on page 26).

Browse duplicate files

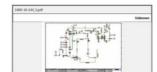




- 2. On the left side of the screen, on the **Resolve Status** tab, select the **Unknown** check box to view all items with an **Unknown** status.
- Point to a thumbnail, and click Change Status. Then select a status from the Resolve Status list.

Using the sample data, specify the file with fewer instruments as Historical.







Compare duplicate files

- 1. Click Compare Duplicates
- 2. Drag two files to the right pane.

Using the sample data, you can expand the **Unknown** node in the left pane. Drag the first 1409-10-144_3.pdf file to the right pane. Then, drag the second 1409-10-144_3.pdf file to the right pane.

3. Click Overlay Differences

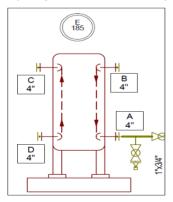


The differences between the selected files appear in green.

- 4. Click **Side-By-Side** to place both the files side by side and compare the images.
- 5. Select a status in the Resolve Status list.

Using the sample data, specify the 1409-10-14_3.pdf file that does not have Exchanger E-185 as **Historical**.

Specify the 1409-10-14_3.pdf file that does have Exchanger E-185 as the **Master**.



Send duplicate files for approval

After identifying the status for documents, a reviewer can review and approve the document statuses.

1. Log on to SmartPlant Fusion as FusionReviewer.

- 2. Click Fusion Quality Control.
- 3. Click Resolve Duplicates.
- 4. Click the To Do List.
- 5. In the **Duplicate Documents** pane, select a document.
 - Using the sample data, select 1409-10-144.
- 6. Review the **Resolve Status** column for all the files in the **Duplicate Files for Document** pane.

Using the sample data, the file 1409-10-144_3.pdf with the Exchanger E-185 on it is set to **Master**, four of the file statuses are set to **Historical** and one file is set as **Ignore**.

7. Click Send for Approval

Specify a file location to store files with the Ignore status

If you mark a file with the **Ignore** status, you can specify a file location to store the files.

- 1. Log on to the SmartPlant Fusion Administration module as FusionAdministrator.
- 2. Click Central Settings, and then click General Settings.
- 3. Type a file path where you want to copy the files that you mark with the Ignore status.
- 4. Click Save.

Load a document index into SmartPlant Fusion

Additional information about documents can be defined in spreadsheets or in a Microsoft Access database. You can then apply this additional information to documents by loading it into the SmartPlant Fusion database as document index spreadsheets.

- 1. Log on to SmartPlant Foundation as FusionDocController.
- 2. Click Administration > Load Fusion Document Index.
- 3. Browse to the DocumentIndex.xlsx file from the Sample Project Setup folder.

You can find a sample file at the following locations:

- [drive]:\SmartPlant Foundation 2016 Server Files\Web_Sites\[site name]\SampleData\Sample Project Setup.
- [drive]:\SmartPlant Foundation 2016 Server Files\Web_Sites\[site name]\SampleData 2016\Sample Project Setup.
- 4. Click Load, and then click OK.

If you are using the sample data, you might notice that 6 of the 14 documents are updated from the document index with new values for Revision, Unit, Project, Discipline, Document Type, Attr 1, Attr 2, Attr 3, Attr 4, Attr 5, and Attr 6. You can search for Fusion Documents and Drawings in the Quick Find box to view the files.

Extract tags from the loaded files

SmartPlant Fusion uses various readers available in the application to process the files that have been loaded into the database. Before you can extract tags, the master file must be identified for any duplicate documents.

Run a content discovery task to extract tag data from images

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the Content Discovery Task page, click Create Content Discovery Tasks 🗱.



- 5. Select the Document Criteria filter and Document Reader filter to process the documents that match the selected criteria.
- 6. Select one or more file types for the selected document reader filter. Using the sample data, you can select Image Reader from the Document reader filter list.
- 7. Leave the file type and document name pattern blank to search for all documents that need to have their contents extracted.
- 8. Click **OK** to view the list of documents to be processed. Click **OK** again.
- 9. Click Refresh to view the progress. When the job is 100% complete, click the Documents tab to view the documents that were loaded into SmartPlant Fusion.

Run a content discovery task to extract tag data from documents

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the Content Discovery Task page, click Create Content Discovery Tasks 🐝.
- 5. Select the Document Criteria filter and Document Reader filter to process the documents that match the selected criteria.
- 6. Select one or more file types for the selected document reader filter.
 - Using the sample data, you can select Document Reader from the Document reader filter
- 7. Leave the file type and document name pattern blank to search for all documents that need to have their contents extracted.
- 8. Click **OK** to view the list of documents to be processed. Click **OK** again.
- 9. Click Refresh to view the progress. When the job is 100% complete, click the Documents tab to view the documents that were loaded into SmartPlant Fusion.

Using the sample data, three documents with a status of Document Processed appear on the **Documents** tab after processing.

Run a content discovery task to extract tag data from drawings

IMPORTANT Copy the SPFHotSpotter.ini file from the [drive]:\Program Files (x86)\SmartPlant\Fusion\2016\SampleData folder to the [drive]:\Program Files (x86)\SmartPlant\Foundation\2016\SPFSmartConverter folder before you begin extracting content and tags from drawing files with the SmartConverter.

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the Content Discovery Task page, click Create Content Discovery Tasks 🗱.



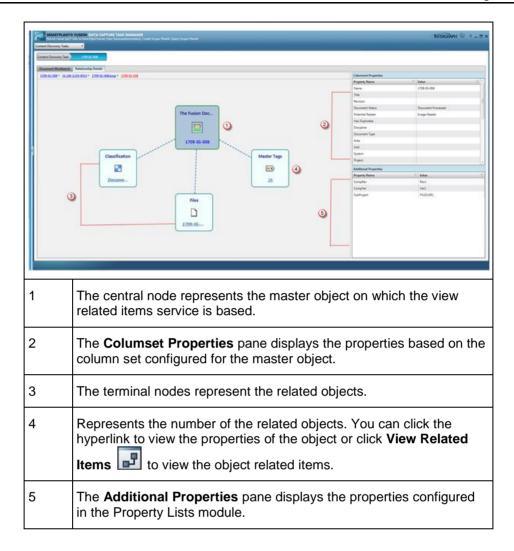
- 5. Select the Document Criteria filter and Document Reader filter to process the documents that match the selected criteria.
- 6. Select one or more file types for the selected document reader filter. Using the sample data, you can select Drawing Reader from the Document reader filter
- 7. Leave the file type and document name pattern blank to search for all documents that need to have their contents extracted.
- 8. Click **OK** to view the list of documents to be processed. Click **OK** again.
- 9. Click Refresh to view the progress. When the job is 100% complete, click the Documents tab to view the documents that were loaded into SmartPlant Fusion.

View the extracted tag data

In the **Progress** tab, select a document, and click **View Document Relations** following details:



- Click the **Document Workbench** tab to view the file and the tags extracted from the document.
- Click the **Relationship Details** tab to view the relationship details of the document as shown in the following example:



NOTES

- The terminal nodes displayed are based on the EdgeDefs configured on the view related items client API method. The EdgeDefs can be configured as a parameter (Arg1) for the view related items client API method in SmartPlant Foundation Desktop Client.
- The View Related Items client API method must be related to the interfaces realized by the selected document. If this method is not related to any of the selected document interfaces, then the terminal nodes in the diagram represent objects expanded from the relationship and user-defined edge definitions related to the master object.
- When a tag is selected in the Document Workbench, the tag is highlighted in the PDF rendition file if a rendition already exists for the document.
- If a property created in either the Tag Naming System or in the Property Lists module has a relationship configured against it, that relationship is created during the content discovery task.
- You can click the View error log hyperlink of the content discovery task in the Summary tab to view the Error Log in the Content Discovery Task.

Correct document classification

You can use the SmartPlant Fusion Quality Control module to correct relationships that were incorrectly defined.

- 1. Log on to Fusion Quality Control as FusionReviewer.
- 2. Click Relationship Dashboard.
- Select the **Document Type** node, click **Search Documents** .
 In the sample data, three documents were not classified: 1409-AT-1050, 1409-AT-1865, and 1409-AT-1867.
 - Click the document hyperlink to open and view the file.
- 4. Select the unclassified documents and drag them to the CFT node, then click Save.
- 5. In the CFT tree, click Search Documents $\operatorname{\mathbb{A}}$.
- Select a document, and then click Relationship Details
 Using the sample data, select 1409-AT-1050, 1409-AT-1865, and 1409-AT-1867.
- Drag the documents to a node to classify them. Click Save.
 Using the sample data, drag the documents to the node 30 under the Discipline node.

Use Leica TruView in the SmartPlant Foundation Desktop Client

You can view laser scans in SmartPlant Fusion using Leica TruView in the SmartPlant Foundation Desktop Client. You can view and create new hotspotted items and tags.

IMPORTANT You must install and configure the site with TruView Integrator to view laser scans.



IMPORTANT The following topics use sample data that is loaded when you create your sample data site, using the Copy example data option in SmartPlant Foundation Server Manager. When you select that option, the Station9 Leica TruView document and laser scan are loaded into your sample site.

Load the laser scan document

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the **Document Discovery Tasks** page, click **Create Document Discovery Tasks**



- 5. Select a document discovery pattern from the list.
 - Using the sample data, select ExampleMapFile-LaserScan in the Document Discovery Pattern list.
- 6. Click OK.

Extract data from the laser scan document

- 1. Log on to SmartPlant Fusion as FusionDocController.
- 2. Click Data Capture Task Manager.
- 3. Verify that your scope is set to the site containing your sample data.
- 4. On the Content Discovery Task page, click Create Content Discovery Tasks 🐝.
- 5. Select the **Document Criteria** filter and **Document Reader** filter to process the documents that match the selected criteria.
- 6. Select one or more file types for the selected document reader filter.
 - Using the sample data, select Laser Scan Reader from the Document reader filter list.
- 7. Leave the file type and document name pattern blank to search for all documents that need to have their contents extracted.
- 8. Click **OK** to view the list of documents to be processed. Click **OK** again.
- 9. Click Refresh to view the progress. When the job is 100% complete, click the Documents tab to view the documents that were loaded into SmartPlant Fusion.

View the tag data extracted from the laser scan document

- 1. Select the content discovery task in the **New Items** window, and click **View Related Items**on the shortcut toolbar.
- 2. Click the **Documents** tab to view the documents.
- 3. Select a document from the list, and click **View Related Items** on the shortcut toolbar.

 TIP In the **View Related Items** dialog box, tabs display the alias and master tags extracted from the selected document.

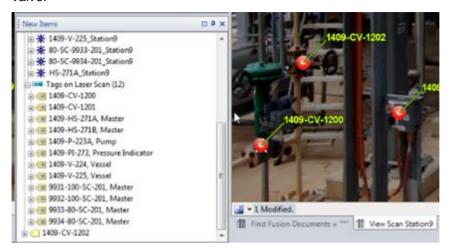
Find hotspotted items and tags

- 1. Log on to SmartPlant Foundation Desktop Client as FusionViewer.
- 2. Use the Quick Find box to find your laser scan document.
 - Using the sample data, find Station9.
- 3. Right-click the document, and click Files > View Laser_Scan Document.
- Select a laser scan document, and drag it to the New Items window.
 Using the sample data, drag the Station9 document.
- 5. Right-click the document, and click **Show tags on Laser Scan** to view all the related laser scan tags.
- 6. Right-click a tag in the tree view, and select View Item In Laser Scan.
 - You can move the image around in the **View Scan** window by dragging the pointer anywhere in the window.

Create a new SmartPlant Fusion tag and hotspotted item

- 1. Log on to SmartPlant Foundation as FusionAdministrator.
- 2. Click File > New > Fusion Items > Master Tag.
- Type the tag name in the **Tag Name** box.
 Using the sample data, type 1409-CV-1202.
- 4. Click Finish.

5. Find the new tag in the tree view, and drag it to the Leica TruView window near the control valve.



6. Click the control valve in the laser scan.

The tag name is related to the selected control valve. The symbol indicates that it is a hotspotted item.

7. Click and click **Commit** to save the hotspotted item to the laser scan and database.

View data in the SmartPlant TruView Integrator Web Portal

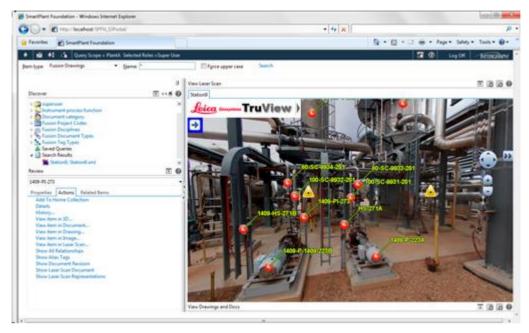
Using the SmartPlant Fusion Viewer web part, you can view your SmartPlant Fusion data. Depending on your security privileges, you have access to all of the functionality of SmartPlant Foundation Web Portal, including:

- View information from the database about a specific object or categories of objects
- Query, search, and filter objects in the database
- View drawings and 3D models
- View a revision history for a particular object
- Print and report on objects in the database

View data in the Web Portal

- 1. Log on to the Web Portal using **TruView_SPFNDefault.aspx** as the starting page.
- 2. In the Search web part, select Fusion Documents and Drawings in the Item Type list.
- 3. In the **Name** box, type the name of the laser scan document and click **Search**. Using the sample data, type *Station9*.
- 4. Click the document name to open and view the document.

NOTE The Leica TruView component and all of the GeoTags are displayed in the View Laser Scan window



For more information on using the SmartPlant Foundation Web Portal, see the SmartPlant Foundation Web Portal User's Guide.

SECTION 4

Help, support, and training

Check out these resources to make the most of SmartPlant Fusion.

Help and documentation

Learn more about how to use SmartPlant Fusion from the product documentation. To view, click **Help** in the software.

Support

Visit the Smart Support Web site (https://smartsupport.intergraph.com (https://smartsupport.intergraph.com)) to contact Intergraph Support.

Training

To find out more information about SmartPlant Fusion courses that are being offered, visit http://www.intergraph.com/ppm/training.aspx. http://www.intergraph.com/ppm/training.aspx.

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