



# StreamServe Persuasion SP5

## New Features

Rev B

StreamServe Persuasion SP5 New Features  
Rev B

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# Introduction

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This document briefly describes new functionality and changes in StreamServe Persuasion SP5. For detailed user and installation information, see the StreamServe user documentation.

## Supported platforms and software

For information on supported software, see *StreamServe Persuasion SP5, Supported platforms and software* documentation.

## Upgrading and migrating

For information on how to migrate and upgrade StreamServe Projects and migrating the databases to Persuasion SP5, see *StreamServe Persuasion SP5, Upgrading Instructions*.

## End-of-life products

Products that are placed in end-of-life in Persuasion SP5 will be removed from the StreamServe product suite at next major release, i.e. StreamServe 6.x. End-of-life products will still exist and be maintained in this release, but no more development will be made. Products that are placed in end-of-life in SP5 are:

- ADO connectors. They have been replaced by the JDBC connectors from Persuasion SP4.
- Service Broker. It will not be replaced by another product, but rather by the use of a combination of the Job Submit web service, the service request input connector and service call output connector, which are introduced in SP5.
- Document Broker on FastObjects.

## Corrected bugs

All bugs that are corrected in hotfixes for StreamServe Persuasion SP4 are also corrected in Persuasion SP5. The hotfix documentation is available in the web based StreamServe Hotfix Info tool:

<http://hotfixinfo.streamserve.com/fixinfo>

The tool is also available from StreamShare and from the StreamServe Support web.



# New and changed functionality

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This section describes new functionality on an overall basis. For more detailed information, see the StreamServe Persuasion SP5 user documentation.

The main focus in StreamServe Persuasion SP5 is the Correspondence Management solution with Composition Center, and the Ad Hoc Correspondence and Correspondence Reviewer web applications.

Other focus areas are StoryTeller improvements and StreamServe Connect for SAP.

## Control Center

### Users in Control Center

To log on to Control Center and manage the StreamServe applications on a computer, each user needs a login for the management gateway. Management gateway users can have an Administrator role or a Basic role. These roles control access rights for users in Control Center.

#### Management Gateway Administrator

The Management Gateway Administrator is created with the Control Center and Framework Setup, or Framework Setup on UNIX. This user is assigned the Administrator role and can be used the first time you open Control Center.

### Welcome to Control Center

The first time you open Control Center a Welcome window is displayed, and you are prompted to enter a new password for the local Management Gateway Administrator.

After you enter a new password, the Configure Enterprise Repository dialog box is displayed, which you can use to specify the connection settings to the enterprise repository.

### Viewing installed StreamServe components

From Control Center, you can now view all the StreamServe components (with version information) installed on a computer. This information can be used when raising an incident with StreamServe support.

### Forcing document type update

You can force a modified document type into the enterprise repository and the runtime repository when you redeploy a Project. This is useful, for example, if you have removed a metadata from an already deployed Project. There is a new dialog box called Force Document Type Update.

**Note:** Forcing a document type into the enterprise and the runtime repositories does not affect the document type in the StreamServe archive.

To be able to force an update of the runtime repository there are a number of requirements, such as that there are no running jobs. See [Forcing metadata changes into a runtime repository](#) on page 23. You can launch the Database Administration Tool directly from Control Center to make sure that you meet these requirements.



Only Administrators users are allowed to force document type updates. See [Management Gateway Administrator](#) on page 24.

## Redeploying a Project with modified StoryTeller Processes

Versioning of Composition Center templates is implemented to avoid version conflicts and to ensure that the correct StoryTeller Process is used when generating output documents. For more information, see [Template versioning](#) on page 11.

## Template versioning

Due to the implementation of Composition Center template versioning, the Compare Composition Center Templates tool and the Manage templates dialog are introduced in Control Center. For more information, see [Template versioning](#) on page 11.

## Creating databases

### StreamServe Enterprise repository

In previous versions, the StreamServer Enterprise repository was created in the Setup. Now you create the Enterprise repository directly from Control Center or by generating database scripts to be run later.

### Creating Oracle databases

In Persuasion SP5, you can create Oracle databases (runtime repository, enterprise repository and web content repository) directly from Control Center. In previous versions, this was only possible for Microsoft SQL Server.

### Database scripts naming

The naming of the database scripts generated by Control Center is improved. Example of new naming:

```
<Base directory>\<Version>\root\config\database\<Application domain>-<GUID>.zip
```

Where:

- *<Base directory>* is the path specified for StreamServe Projects during the Framework and Control Center installation.  
For example: C:\ManagementGateway
- *<Application domain>* is the name of the application domain.
- *<GUID>* is a globally unique identifier for the ZIP file.

## Managing database hotfixes

Hotfixes requiring database upgrades can now be applied from Control Center. This provides a simplified way to apply database hotfixes.

You can apply a database hotfix to all the StreamServe repositories:

- Enterprise repository
- Runtime repository
- Web content repository
- StreamServe archive

The database hotfix is applied from the Create Database dialog box.

## Java configuration

Configuration of Java parameters for a StreamServe application is moved from Design Center to Control Center.

In the Configure Platform Export Settings dialog box, you configure the Java parameters for a StreamServe application. For example, the target Java Runtime Environment (JRE) and the Java command line arguments.

This concentrates the Java configuration to the platform.

## Task Scheduler application

A new Task Scheduler application is available in the application domain.

Task Scheduler can perform one or more tasks at scheduled intervals. For example, trigger maintenance of the runtime repository each night at 1:00 a.m. The tasks are configured in the Service Configuration dialog box.

The following tasks are implemented:

- Run system command – Creates a system command task that is executed according to the schedule.
- Update job status – Updates and report statuses of top jobs.
- Delete expired jobs – Deletes expired StreamServe jobs from the runtime repository according to specified schedule.
- Delete expired Messages – Deletes expired Messages from Message storages in the runtime repository according to specified schedule.
- Delete expired documents – Deletes expired documents from Post-processing storages in the runtime repository according to specified schedule.
- Run database maintenance – Performs database maintenance on a specified repository according to specified schedule.

For information on how and when to use the tasks related to the StreamServe repositories, see the *Database Guidelines*.

## Archiver application tasks

Two new tasks are added to the Archiver application:

- Archive time-stamping – Used with E-Invoicing, see [Archive time-stamping](#) on page 38.
- Migration – Used when upgrading.

These tasks are set in the Service Configuration dialog box in Control Center.

## Configuring service gateways

In SP5, you no longer configure the URLs and port numbers of the service gateway web services in the Application Domain Editor.

Instead, you add configure the service gateway applications outside the Application Domain Editor. In the editor, you can then select which is the primary and which is the secondary service gateway.

## Comparing versions in different application domains

In Control Center, in the Manage document types and Manage templates dialogs, a **Compare** button and function is available.

This new function can be used to check the impact redeployment will have, before redeploying the Project. For example, to compare the Composition Center template and document type versions that are used in the development environment and in the production environment.

Note that this function was introduced too late to be included in the documentation for Persuasion SP5 GA.

## Correspondence Management

In addition to StreamStudio Composition Center, StreamServe Correspondence Management also includes two other web applications – Ad Hoc Correspondence and Correspondence Reviewer.

These web applications are plug-ins, integrated into an existing business workflow to enhance its correspondence capabilities. For example, an SAP document collaboration workflow. The business workflow owns the correspondence process and invokes the web applications using web service calls.

See *Ad Hoc Correspondence and Correspondence Reviewer User Guide* and *Ad Hoc Correspondence and Correspondence Reviewer Administrator's Guide*.

### Ad Hoc Correspondence

The Ad Hoc web application in Persuasion SP5 can be considered as a new feature. The version delivered with Persuasion SP4 is thoroughly reworked, based on customer feedback.

Ad Hoc Correspondence supports an organization when creating ad hoc customer correspondence. The application is used when writing a new personalized document to a specific customer, or when editing an existing document before it is formatted and distributed to the customer. The document templates used in Ad Hoc Correspondence are document definitions, published in StreamStudio Composition Center.

A typical Ad Hoc Correspondence user is a business user at a department with frequent customer interaction that requires documents to be created on unplanned basis. For example, a business user at a bank, at a call center, or in a claims department.

### Correspondence Reviewer

Correspondence Reviewer is a new web application in Persuasion SP5.

Correspondence Reviewer helps an organization to create quality assured documents. The application is used to review a document before it is formatted and distributed to the customer. The reviewed document can be approved, rejected, edited, or deleted.

An example of a Correspondence Reviewer user is a business manager at a department with frequent customer interaction. The business manager reviews customer correspondence and approves or rejects the documents involved.

## StreamStudio Composition Center

### Template versioning

Versioning of Composition Center templates is implemented to avoid version conflicts and to ensure that the correct StoryTeller Process is used when generating output documents.

StoryTeller Processes that are used as templates in Composition Center are automatically given version numbers. These version numbers are (at Project deployment) stored as template version numbers at redeployment and used to compare templates.

You can also modify the version numbers manually in StoryTeller. For example, if you have restored an older version of a StoryTeller Process that should be redeployed.

#### Managing templates

StoryTeller Processes and their version numbers are stored as Composition Center templates in the enterprise, runtime and web content repositories. The versions stored in the enterprise repository are the masters. They determine which information to store in the other repositories and are used to keep track of the versions that are used in Composition Center.

When a Project is redeployed, the StoryTeller Processes and their version numbers are compared to the information in the enterprise repository. In the following cases, the Project cannot be redeployed:

- The new version number is lower than the version number in the enterprise repository.
- The new version number is equal to the version number in the enterprise repository, but the layout of the templates differ.

#### New dialogs and tools

The following dialogs and tools are introduced to handle template versioning:

- The Compare Composition Center Templates tool – Available in Control Center and displays information that helps you make the necessary corrections if redeployment fails.
- The Manage templates dialog – Available in Control Center. Displays information about templates and can be used to delete templates from the repositories.
- The Composition Center template version pane in the Processing Properties dialog – Available in StoryTeller and used to manually modify the version number for current StoryTeller Process.
- The Set Composition Center template version dialog – Available in Design Center and used to update multiple version numbers, for example, when upgrading.

## Document preview

Previewing documents in Composition Center is improved by using web services to handle preview requests. You can use a default pre-configured preview output connector to display documents, or manually create a preview output connector.

## Metadata

### Metadata groups

Metadata is now presented in groups, which makes it easier to handle large metadata volumes. The groups are configured in Design Center.

### Metadata GUID

Metadata is now referenced internally by a GUID (Global Unique Identifier) instead of by name. This means that metadata can be renamed in Design Center without damaging texts and rules in Composition Center, and that the new metadata names are used in Composition Center.

See [Document types and metadata](#) on page 22 and the *Document types and metadata User Guide*.

### Enhanced warnings when metadata is removed

Warning icons and texts are displayed in Composition Center when metadata that is used in Composition Center is removed from the system. The warnings are displayed to all users in the Manage document definitions view, the Rules editor, the Manage resource view, etc.

Users with full access rights can open and update resources directly from the Metadata impact report. This report lists:

- Metadata that is used in resources and that has been removed.
- Reusable texts and reusable rules that contain removed metadata.
- Document definitions that contain affected resources, or contain custom rules or embedded texts that are affected.

## Document definitions

### Used in both batch and ad hoc document production

A published document definition can be used in both batch and ad hoc document production.

A default rule is no longer automatically set on document definitions. This means that Composition Center users must manually set a rule on document definitions that should be used in batch document production.

### **Organized in folders**

Also document definitions can now be organized in folders. Folders speed up the presentation of available resources and document definitions, and make it easier to find resources when adding content to document definitions.

### **Mass updating and publishing**

It is possible to update and republish a several document definitions at the same time. For example, when a template is updated or a resource is modified.

## **Content and resources**

### **Enhanced text editor**

There are a number of text editor improvements:

- Preview metadata in formatted texts.
- Use numbered lists in texts.
- Use tables in texts. To simplify the table configuration, users can select predefined table layouts. These layouts are customized in a style sheet file.

### **Arial used as default font in text editor**

Arial is used by default when no font was selected in the text editor. In previous versions, Times New Roman was used by default.

### **Customized spacing**

The spacing property is used by Composition Center users to control spacing before and after texts and images in the documents. It is possible to customize spacing values and units in a properties file.

### **Customized text indentation**

By using a new indentation property, it is possible to control how much text is indented from the left margin. The property is similar to the spacing property.

### **TIFF image resource**

It is possible to upload TIFF formatted image files to StreamStudio Composition Center.

### **Providing texts for ad hoc document production**

Composition Center users can create texts that Ad Hoc Correspondence users can add to their documents and also edit in the Ad Hoc Correspondence application.

### **Content access**

It is possible to change the content access setting, i.e. make a private resource public and vice versa.

## Rules

### Rules editor

When composing rules in the rules editor, you can:

- Compare metadata with other metadata.
- Use the `contains`, `starts with` and `ends with` operators when comparing metadata to values.

### Reusable rules

Reusable rules can be shared by several users and reused in several document definitions. These rules are either configured in Design Center and uploaded in Composition Center, or composed in the rules editor in Composition Center.

When configuring rules in Design Center, scripting functions can be used.

### Section no longer required in StoryTeller Process

In previous versions, a Composition Center enabled StoryTeller Process must have contained at least one section to make the template available in Composition Center.

This is no longer required, which enables business users to control document distribution without managing any content in Composition Center. To control when documents are distributed to customers, business users can create rules or upload predefined rules in Composition Center.

## Redesigned user interface

There are a number of user interface improvements:

- Improved navigation possibilities.
- A number of views are redesigned and have improved functionality. For example, the Manage resources view and the Preview view.
- New icons are implemented.

## StoryTeller

### Previewing

You can preview a document, without having to export, deploy and restart the StreamServer application or install any Python interpreter.

You run the preview by using a new option **Preview** in the Tools menu.

### Language and translation

Language and translation improvements:



- You can specify the default language to use for both design-time and runtime, as well as on a specific range of text or substitution. The language code follows ISO standard with an optional country/region code. For example, "en-GB" for British English.
- You can switch content depending on the current language during processing.
- You can enable runtime translation and you can simulate translation processing during design-time. A new Substitution type, Translation, is introduced.

## Text handling and graphics

A number of improvements are made regarding text handling in StoryTeller:

- Hyphenation – You can set default hyphenation for texts, according to the hyphenation library for the selected default language. StoryTeller uses the TALO hyphenator.
- Hyperlinks – You can add hyperlinks to objects on a page and in texts.
- Area resizing – You can let the area size change vertically and horizontally to fit the text within the text object, Story frame or table cell.
- Bullets and numbering – Toolbar galleries are introduced for bullets and numbered lists. You can define your own bullets and lists by editing the settings in an XML configuration file.
- Displaying special characters – You can make invisible text commands and object borders visible.
- Formatting symbols – New formatting symbols are introduced for paragraph break, line break, space character, and non-breaking space character.
- Gradient fill – You can specify solid color filling for the whole object or gradient filling. Gradient filling means a transition between two colors vertically, horizontally or radially.
- Corner effects – There are new properties for corner effects of shapes like text areas, Story frames and tables, e.g. rounding of corners. It is also possible to mix different corner effects in one shape.

## Tables

A number of improvements in table handling:

- Split table cells – You can let a table row split if the content of a table cell in the row does not fit into the current Story frame. A new table row will be added in the following Story frame where the content continues.
- Keep with next on table row. You can define the number of table rows you want to be kept with the current row.

- Table view is introduced in parallel to Document, Page and Story views. The Table view shows all rows of the table regardless of overflow settings.

## Document structure and sorting

A number of document structure and storing improvements are implemented:

- Substitution types – New **Insert > Substitution Type** menu is added to create substitutions of a specific type.
- Metadata substitution type – A new substitution type Metadata is added to allow placing of data represented by metadata name defined in Document Type in Design Center.
- You can now set modifications on more properties on a page link. For example the page count property.
- You can use the anchor point to place a page object in another position than in the top-left corner.
- Support is added for multi-column sections within a Story frame, and it is possible to balance the columns evenly.
- You can force the subsequent content of a Story frame to continue in the next Story frame linked to the current Story.
- Sorting – When using a repeater to render data from a Message, you can specify sorting criteria for this data. This allows you to change the order of selected data elements, usually the order of blocks in a Message.
- Filtering was also implemented on repeater to allow selection of first or last instances in the sorted order. Filtering can be used without sorting.
- You can now reference fragments deeper into the page structure. For example, you can reference a table fragment, without having to reference the whole page.
- You can edit an embedded fragment in an embedded fragment. For example, a content dependent "Page of Pages" fragment embedded on a master page fragment.

## Resources

The following improvements are implemented regarding resources:

- Editing external resources – You can edit referenced objects, for example non-embedded images or external fragments, directly in their default editor.
- Refreshing external resources – Automatic refresh of a referenced objects is possible, for example non-embedded images or external fragments, as well as explicit refresh by selecting to refresh from the menu.
- Design Center resource names – The resource name is also displayed. In previous versions, Design Center resources were displayed by UID.

## General

### Importing objects

Objects can be imported from existing documents. You can browse objects in other documents, for example other StoryTeller documents, and import page definitions, stories, tables, or other objects to your current document.

You can import several objects simultaneously using multi-selection.

### Used Scripts panel

The Scripts panel now provides direct links to the object where the script is implemented. You can view the scripts directly from the Used Scripts panel.

### Used Fonts panel

The Fonts panel now enables you to select a specific font and view where the font is used in the document.

### Working with Message definitions off-line

You can save a Message definition in a file, and then load that Message definition file when working off-line or when editing a resource file.

### XPath library

The open source XPath library `libxm12` is used now instead of the in-house XPath library. This provides better compliance with XPath 1.0 and faster XPath parsing.

### Normalization of non-XML names

Blocks and fields that do not match XML naming rules are automatically renamed to make it possible to use the names in XPath expressions.

### Document trigger

Process mode is enabled for StoryTeller documents meaning that document trigger functionality can be used. For backwards compatibility, the new Design Center option Automatic Document Trigger is activated for old Projects. For new StoryTeller designs the option is by default disabled since an explicit document trigger can be set.

### Dynamic selection of process design file

You can dynamically select the Process definition file in runtime by setting the name of the StoryTeller Process to a variable. The selected Process definition can be in any supported format, e.g. SSD, RTF or XHTML.

### Processing properties

You can specify a number of processing properties that are used in runtime. For example you can have a default language in runtime and another in design-time.

### Notification about changed Message

You can get notifications about changes in a Message definition. This requires manual configuration.

## Database Administration Tool

The Database Administration Tool (DBAT) has been improved to assist in the migration of databases and content between Persuasion versions and StreamServe environments. DBAT is used to administer databases used by StreamServer and StreamStudio applications:

- Runtime repository
- Enterprise repository
- Web content repository

### Runtime repository administration

#### Migrate runtime repositories

Migrate resources and security data (roles, permissions, etc.) from one runtime repository to another when upgrading or when migrating data between test, production, etc.

#### Import document definitions

Import document definitions from a web content repository.

#### Examine, expire, delete, and cancel jobs

- Examine jobs in the runtime repository
- Expire and delete top jobs
- Cancel sub jobs

#### Administer queues

- Examine queues and queued jobs
- Purge and delete queues
- Cancel queued jobs

#### Examine and delete runtime resources

- Examine the properties and contents of the resources
- Delete resources

#### Administer saved Collector searches

- View saved Collector searches assigned to users and roles.
- Assign searches to users and roles.
- Remove searches from a user/role.
- Delete searches.

#### Administer the Archiving queue

- Examine the archiving queue

- Retry to archive failed documents

### **Examine and delete text areas used in Composer**

- Examine text area properties
- Delete text areas

### **Examine document types**

Examine document types and metadata.

### **Administer Message storages**

- Examine Messages in a Message storage
- Expire and delete Messages in a Message storage
- Drop Message storages

### **Administer Document Broker Plus storages**

- Examine documents in a Document Broker Plus storage
- Expire and delete documents in a Document Broker Plus storage
- Drop Document Broker Plus storages

### **Examine and delete persistent resources**

- Examine the properties and contents of the resources
- Delete resources

## **Enterprise repository administration**

### **Migrate enterprise repositories**

Migrate enterprise repository contents from one enterprise repository to another.

## **Web content repository administration**

### **Migrate web content repositories**

Migrate document definitions and related resources from one web content repository to another.

## Document Broker Plus

Document Broker Plus enables StreamServer applications to store documents in a common repository. A StreamServer application can retrieve the stored documents, and deliver the output via the appropriate output channels.

Variables and metadata can be stored with the documents, and be used by the retrieving StreamServer application for various purposes such as scripting, sorting, enveloping, etc.

The document storage used by Document Broker Plus is a runtime repository. This means all documents are stored in a runtime repository, and no additional database for document storage is required.

See the *Document Broker Plus* documentation.

### Supported databases

Document Broker Plus supports the relational databases Oracle and SQL Server. For details about versions and editions, please refer to the *Supported software and platforms* document.

### Output connector and driver for storing documents

Document Broker Plus uses a `Post-processor repository (SQL)` output connector and an `SDR for Relational Database` driver to store documents in the document storage.

### Metadata and document storage

In Document Broker Plus you must specify metadata in a document type resource that you connect to the output connector.

### Unsupported script functions

The following post-processor script functions cannot be used in Document Broker Plus:

- `CurrJobProperty`
- `GetJobProperty`
- `GetSegJobProperty`
- `GetPpJobProperty`
- `GetPpReposProperty`
- `GetReposProperty`
- `GetSegReposProperty`
- `UpdatePPDocStatus`

### Document Broker for FastObjects

Previous versions of StreamServe Persuasion include a Document Broker solution where documents are stored in a FastObjects database. This solution is still available in StreamServe Persuasion SP5, but there will be no further development of the FastObjects solution.

### **Upgrading to Document Broker Plus**

You can upgrade Document Broker for FastObjects to Document Broker Plus in StreamServe Persuasion SP5.

Document Broker Plus is not an exact replacement to Document Broker. Some features are not possible to replace when switching the underlying technology.

### **Do not mix FastObjects and Document Broker Plus**

You cannot use Document Broker for FastObjects and Document Broker Plus in the same Design Center Project.

## Document types and metadata

See *Document type and metadata* documentation.

### Connecting metadata to document types

Document type and metadata configurations consist of:

- Metadata groups containing metadata.
- Document types connected to metadata groups.

In Persuasion SP5, you connect each metadata group to appropriate document types. This means you specify the connections between metadata groups and document types in the metadata group editor – not in the document type editor as in Persuasion SP4.

#### Global resource set

You must create a global resource set for all document types and metadata groups used within an organization. This ensures that all document types, metadata groups, and metadata are unique.

#### Global metadata removed

Global metadata (**Metadata entries are global** in SP4 Metadata group editor) is not used in SP5. To achieve the same result as using global metadata, you must connect the metadata group to all document types in the global resource set (**Auto-apply to all Document types** in SP4 Metadata group editor).

#### Metadata shared by several document types

Metadata groups can be connected to one or more existing document types in the global resource set. This is done by selecting document types manually in the metadata group editor.

#### Metadata shared by all document types

Metadata groups can be connected to all existing, as well as to all future, document types in the global resource set. This is done by selecting **Auto-apply to all Document types** in the metadata group editor.

### Using document types in contexts

Using document type context makes it possible to handle document types differently depending on where they are used. For each context, you can specify which metadata attributes to use. The document type contexts are:

- Archive context – In this context you specify which metadata to store in the StreamServe archive, and to use in StreamStudio Collector to search for documents in the StreamServe archive.



- Message context – In this context, you specify which metadata to store in Message storages in the runtime repository. This metadata can be used by Correspondence Reviewer and other web services that use the WSDocument API:s.
- Post-Processing context – In this context, you specify which metadata to store in Post-Processing storages in the runtime repository. This metadata can be used when post-processing documents (enveloping and sorting).

## Forcing metadata changes into a runtime repository

In the following situations, a document type can be redeployed only if data is updated in the repositories by a user with special privileges:

- When the metadata type is changed.
- When metadata is removed.
- When metadata is disabled in a context.

If you make any of the changes above, and try to redeploy a Project in Control Center, you will receive a message saying you cannot redeploy unless you force the updates into the runtime repository. In this case, you have the option to click **Cancel** to cancel the action or **Force update** to force the updates into the runtime repository and deploy the Project.

## Installations – Setup

### Creating Enterprise repository

The Enterprise Repository Setup has been removed from the Setup. You now create the enterprise repository using Control Center or the Command Line utilities after the installation. See the *Control Center* documentation.

### Management gateway and management nanny Windows services

On Windows, the management gateway and management nanny services have been renamed to include the StreamServe version number:

- StreamServe Management Gateway 5.5.0
- StreamServe Management Nanny 5.5.0

### Management Gateway Administrator

This user is created with the Framework and Control Center Setup (or Framework Setup on UNIX) and is assigned the Administrator role.

### Security settings

You no longer select the level of security during the Framework and Control Center Setup or the Framework Setup on UNIX.

This is now part of securing the StreamServe installation. See the *Security* documentation.

### Parallel installations

You can install Persuasion SP5 in parallel with Persuasion SP4.

For more information, see the *StreamServe Installation Guide*.

### Port Monitor and EMF Print Processor Setup

There is now a separate Setup for the Port Monitor and EMF Print Processor. When running the Setup, you select which component(s) you want to install:

- **Port Monitor** – Installs the StreamServe Port Monitor, which enables you to use the Microsoft Windows spool system to send data in RAW format to a StreamServer application.

- **Print Processor** – Installs the EMF Print Processor, which you can use to convert documents from Windows applications into LXF (StreamServe Layout eXchange Format) files.

## LiveCycle Designer ES2

For more detailed information see the *LiveCycle Designer ES2* documentation.

### Access StreamServe variables in the XFA processor

StreamServe script variables can now be accessed within a form template, both when the template uses direct XML data bindings and when StreamServe Message data bindings are used.

### Runtime scripting and post-processing

#### Running scripts before/after each record

You can run Before and After Process scripts, before and after each record. In previous versions, these scripts could only be run before and after each Process. This was a limitation when running XML input containing several records.

#### Assigning variables per page

There is not the possibility to map SOM expressions to each page has been added. The mapping is then done once before each page is output. This enables the use of more advanced functionality in document broker and sheet layout. For example, you can use a page-level variable extracted from a SOM expression to create proper OMR codes in AFP output.

#### Grouping output documents by using Document trigger

The possibility has been added to use Document trigger in Adobe LiveCycle Designer ES2 Processes for output modes Document and Job. In previous versions, use of the Document trigger had no effect on the output. Each record was automatically mapped to one document.

#### Writing to the StreamServe log file

You can write to the StreamServe log file from a script in an XDP template. This is useful during development of StreamServe Projects, for debugging purposes.

### Runtime and repository integration

#### Loading of templates dynamically from LiveCycle ES2 repository

Templates can be loaded directly from the LiveCycle ES2 repository, dynamically during runtime, via:

- Static repository URI.
- StreamServe variable or a SOM expression, specified as a HTTP URI or a repository URI.

### HTTP authentication when loading dynamic templates

Simple HTTP authentication is used when loading dynamic templates from HTTP servers at runtime. A specified user name and password is used in runtime as user credentials when the HTTP server requires authentication.

## XFA 3.1 support

A subset of the XFA 3.1 specification is supported. See [Adobe XML Forms Architecture \(XFA\)](#).

Support for the following XFA features are added:

- **Inactive presence**  
It is now possible to not only hide, but also exclude a field or subform from processing. This is done by using the new `inactive` option that can be set for the script property `presence`.
- **Event propagation**  
There is a new attribute `listen` that can be set for the `<event>` element. With the `listen` attribute the form creators can conveniently implement global procedures for a form.

## Sample Project

The Sample project is only included in LiveCycle Production Print ES2 releases, not in StreamServe Persuasion releases.

The Sample Project has been updated to LiveCycle Production Print ES2.

A Sample 5 configuration, AFP2PDF, has been added for converting AFP files to PDF. This configuration uses the PreformatIN tool and dynamic overlays in the PageOUT Process.

## USPS Intelligent Mail Barcode

The USPS Intelligent Mail Barcode is supported by LiveCycle Designer ES2 by default.

Previous versions of LiveCycle Designer did not support this barcode by default. The barcode had to be manually enabled in LiveCycle Designer ES2.

## Adobe LiveCycle ES2 Workbench process integration – use of applications

LiveCycle ES2 workbench introduces the notion of an application when using the Workbench repository.

All of the assets for a process can be stored in the application and applications can be versioned.

The Production Print service is not aware of applications; it presents a complete repository view for browsing and selecting a form resource in the application.

If a form is created in a LiveCycle application (when designing a process using the production print service) and you select that form in the service property sheet, you will get a view of the complete repository. In order to select the form, you need to browse to the application directory and then select the version of the application in which you are working.

As a side effect, if you create a new application version that uses the production print service, the references to the used forms continue to point at the forms from the base application version. They will not automatically be converted to references to the form in the new application version. The Production Print service property sheet will need to be manually updated to point at the form in the new application version.

# Scripting

See the *Scripting reference* documentation for detailed information.

## Local variables

In previous releases, all variables were global within an input job. The variables were cleared when the job was completed.

In Persuasion SP5, the possibility to use local variables is added. The scope of a local variable is the block within which it is declared, i.e. the variable is cleared when the block is completed.

Global variables are always string, while a local variable can be string or numeric. This may improve performance.

## New script functions

### General functions

#### **StartTimer**

Starts a timer in StreamServer to measure processing time.

#### **StopTimer**

Stops the specified timer in StreamServer, and if required displays the elapsed time in the log and/or writes it to a file.

#### **GetMetaDataMessage**

Returns the current value of a metadata. The metadata must have the Message context.

#### **Execute**

Executes an external program, script, bat file or process.

### Preview functions

#### **IsPreview**

Checks if the current job is a preview job or not. Preview jobs are all jobs returning a non-zero value from the `GetPreviewType` scripting function.

#### **GetPreviewType**

Returns a number, indicating whether the current job is a preview job or not. If the job is a preview job, the number indicates from where the preview job was invoked.

**GetRequestedPreviewContentType**

Returns a string containing an optionally requested content type for a response to a preview request. The returned value can be used to select an appropriate connector for the preview Process.

This function is only available for preview calls from web service clients.

## SAP Delivery Manager functions

**SAPDMDefaultJobErrorSend**

Stores a SAP spool job notification in the runtime repository. The notification states that the job was erroneous. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

**SAPDMDefaultJobOKSend**

Stores a SAP spool job notification for the currently processed spool job id in the runtime repository. The notification states that the job was successfully printed. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

**SAPDMDeviceNotificationSend**

Stores a SAP spool job notification for the specified device in the runtime repository. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

This function allows you to specify detailed notification information. However, in most cases the `SAPDMDeviceOkSend` and `SAPDMDeviceErrorSend` functions are sufficient.

**SAPDMDeviceNotificationSendEx**

Stores a SAP spool job notification for the specified device in the runtime repository. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

This function allow you to specify an Output Center device status code as an input parameter, which the function translates to actual SAP device status parameters.

**SAPDMDeviceErrorSend**

Stores a SAP spool job notification for the specified device in the runtime repository. The notification states that the device has an error. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.



**SAPDMDeviceOKSend**

Stores a SAP spool job notification for the specified device in the runtime repository. The notification states that the device is OK. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

**SAPDMJobErrorSend**

Stores a SAP spool job notification for the specified spool job id in the runtime repository. The notification states that the job was erroneous. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

**SAPDMJobNotificationSend**

Stores a SAP spool job notification for the specified spool job id in the runtime repository. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

**SAPDMJobNotificationSendEx**

Stores a SAP spool job notification for the specified spool job id in the runtime repository. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

**SAPDMJobOKSend**

Stores a SAP spool job notification in the runtime repository. The notification states that the job was successfully printed. At a given interval, the Delivery Manager client reads the notifications in the repository and sends them to the SAP application server.

## StoryTeller functions

There is a number of new StoryTeller script functions:

- stGetProcessingProperty
- stMsgAddNode
- stMsgAttachXML
- stMsgAttachXMLFile
- stMsgSaveToFile
- stIsEmpty

See the *Scripting Reference documentation* for information.

## Security and encryption

See *StreamServe Security* documentation.

### Security tool

The security tool enables you to encrypt a set of XML files in your StreamServe installation to ensure that passwords are not shown in clear text.

On UNIX also the `.operatorInput` file located in the StreamServe installation root folder is encrypted.

### StreamStudio

When you have encrypted your system with the Security tool, you can secure the StreamStudio installation by manually configuring encryption support.

### Web service security

You can enable web service security in Control Center, by specifying that all web service requests to the service gateway are authenticated with the credentials of the user logged in.

For more information, see the *StreamServe Security* user guide and the *Control Center* documentation.

# StreamServe Connect for SAP

## RFC Gateway

The RFC Gateway is a new application type in Control Center, hosting Delivery Manager and Business Process services. It encapsulates the connectivity with SAP NetWeaver.

Connectivity relying on RFC (Delivery Manager, IDoc Converter and BAPI scripting) is now hosted as services within the RFC gateway, thereby simplifying monitoring and administration.

On Windows, running in 32-bit mode is supported as well as 64 bit in compatibility mode.

On Windows, the SAP connectivity pack runs on a 32-bit environment.

The RFC Gateway – including the Delivery Manager and IDoc services - requires a 64-bit environment on the following operating systems:

- SUSE Linux
- Red Hat Linux
- HP-UX
- IBM-AIX
- Solaris

## Delivery manager and Business Processes integration

### Integrated with the Persuasion platform

Delivery Manager and Business Processes are integrated with the Persuasion platform. In previous versions they were stand-alone components. This integration provides improved scalability and reliability.

### Upgraded RFC library

RFC library has been upgraded to the latest SAP NetWeaver RFC library. This improves performance and some limitations are now taken care of. For example, the library is enabled for Unicode.

### Service Request input connector

The Service Request connector can be used to read spool files from delivery Manager or SAP IDoc Converter server instances directly from an input queue.

### Service Call output connector

The Service Call connector can be used to store outbound IDocs directly in the output queue. They are then read and processed directly by the IDoc Converter client instance.

### **Delivery Manager notifications to SAP**

The property Enable XOM Notifications (Design Center, Project Export Settings) makes it possible to send notifications (via Delivery Manager) on processed jobs. For example, errors that occur in an asynchronous delivery of documents can be caught.

Delivery Manager notifications are now stored in the runtime repository. Previously they were stored in files.

Built-in script functions are provided for generating Delivery Manager notifications.

### **BAPI**

BAPI (Business Application Programming Interface) scripting supports RFC connection pooling.

### **SAP IDoc Extractor**

SAP IDoc Extractor is now also a stand-alone tool. In previous versions it was only an add-on to the StreamIN tool.

## **Output+**

Unicode SAPGOF is now supported.

There are significant performance enhancements for large jobs.

## **E-docs**

The XSF filter is now a loadable filter with support for manipulating XSF XML to support node collection, while still allowing pattern on the SmartForm name.

## **Setup and migration**

### **Setup**

The integration of Delivery Manager and Business Processes means that you must install Framework together with the connectivity packs to be able to configure Delivery Manager and Business Processes.

### **Migration/Upgrading**

When upgrading older versions of Delivery Manager or IDoc Converter to Persuasion SP5, the new versions must be manually set up and configured in Control Center based on the old file based configuration.

Upgrading StreamServe Projects does not require manual steps. Both Delivery Manager and Business Processes are fully backwards compatible regarding StreamServe Projects. However, if you wish to make use of the new features in Persuasion SP5, you must manually configure your Project.

**Note:** The Delivery Manager command line utilities `strsdmpoll/`  
`strsdmquery/strsdmcancel` are no longer shipped as part of the  
connectivity package. Contact StreamServe for more information.

Output+ and E-docs XSF filter are backwards compatible.

The XSF filter is no longer an external filter. To use the new version, you must  
instead add the loadable XSF filter to a filter chain in Design Center where you  
can specify to extract specific headers.

## Software development kits

### Web Service SDK

With the web services API, Persuasion SP5 provides improved possibility to build your own solutions based on the Persuasion platform.

The web services API offers a number of services with several methods. For example, the job submit web service that is used to submit one or several jobs to a StreamServer application.

The Notification SDK contains documentation, scenario descriptions and example applications with provided source code.

The Web Service SDK contains documentation, scenario descriptions and example applications with source code.

### Notifications SDK

The StreamServe Java notifications SDK allows StreamServe developers to integrate StreamServe applications into existing business processes by using StreamServe java notifications interface.

The Notification SDK contains documentation, scenario descriptions and example applications with provided source code.

## Other changes

### AFP Color management

International Color Consortium (ICC) profiles can now be added to AFP output. The color profiles can be specified at three levels in AFP output:

- For the entire AFP data stream file.
- For a page in the AFP data stream file.
- For a specific image.

### Design Center

#### Service-enabling a Message

In the new *Service - <Message name>* dialog box, you enable a Message to be invoked through service requests. Based on one Runtime configuration, external applications (for example, Ad Hoc Correspondence, Correspondence Reviewer, or Composition Center) then use services to create, preview, or release Messages. Depending on the type of service request, the service gateway invokes the correct service.

To review a document in Correspondence Reviewer, the corresponding Message must be paused. The conditions for pausing the Message are configured in exception rules. See [Rule resource and Rules editor](#) on page 37. In the dialog box, you select the rule resources to be used as exception rules.

In the dialog box, you can also enable the use of default output connectors for preview. These preview connectors are pre-configured with certain settings (for compression, resolution, etc.) and uses output mode Job. The connectors are not visible in the Platform configuration.

#### Rule resource and Rules editor

In the resource set, there is a new resource type called Rule.

You configure the rule resource in a new Rules editor. In the editor, you create a rule function using the StreamServe script syntax.

You use Rules editor to configure the exception rules that pause the Messages to be reviewed in Correspondence Reviewer. See [Service-enabling a Message](#) on page 37.

You can also create advanced and flexible rules, to be uploaded to Composition Center after the Project export. See [StreamStudio Composition Center](#) on page 11.

#### Java configuration

Configuration of Java parameters is moved from Design Center to Control Center, see [Java configuration](#) on page 8.

### Set Composition Center template version dialog

Due to the implementation of Composition Center templates versioning, the Set Composition Center template version dialog is introduced in Design Center. For more information, see [Template versioning](#) on page 11.

## Directory input connector

### Create Folder

A new setting **Create Folder** is added. If enabled, the folder to scan for input is created if it does not already exist.

### Synchronize scanning

A new setting **Synchronize scanning** is added.

If enabled (default), the connector runs single-threaded and retrieves files one by one from the input folder.

If not enabled, the connector scans the input folder asynchronously. The connector runs multi-threaded and retrieves several files in parallel.

## WebSphere MQ input and output connectors

Three new settings are added:

- **Channel name** – The name of the client connection channel.
- **Channel protocol** – The protocol to use for WebSphere MQ communication.
- **Channel server name** – Host name or IP address of the server running the queue manager.

## E-invoice Center

### Archive time-stamping

Archive time-stamping is introduced and integrated with the Collector archive. This makes it possible to prove to the legal authority that e-invoices have been archived in the Seller's archive within a certain time frame.

For example, if the company resides in Italy, the Seller must execute a procedure that records the decision to archive new e-invoices and the time of this decision. This procedure must be executed at least every 15 days. This means that e-invoices must be archived within 15 days after being digitally signed.

The Service Configuration dialog in Control Center is updated with a new task for archive time-stamping.

See *E-Invoice Center User Guide* and *E-Invoice Center End-user Guide* for a description on how to prove authenticity and integrity of your e-invoices.



## User documentation

The E-Invoice Center User Guide has been improved with descriptions on:

- How to renew your logon credentials after two years.
- E-Invoice Center error handling.
- E-Invoice Center legal considerations.

## Management gateway Windows services

The names of the management gateway Windows services have been changed to include the version numbers. These services are now called:

- StreamServe Management Gateway 5.5.0
- StreamServe Management Nanny 5.5.0

## Queue handling

### Enabling sharing of queues

A new option, Queues can be shared, is introduced in the Platform configuration. The option is used to enable StreamServer applications, in the same application domain, to share queues. This is useful if the StreamServer applications are used for load balancing and failover.

Sharing is by default disabled for the queues to prevent from unintentional queue sharing, where one StreamServer application consumes another StreamServer application's jobs.

### Storing queued documents on disk

A new option, Blobs on disk, is introduced in the Platform configuration.

With this option you can select, for each queue, to store the blobs as files on disk instead of as blobs (Binary Large Objects) in the runtime repository. The runtime repository will include references to the blobs stored on disk.

There are several reasons to store blobs on disk, for example to:

- Improve performance.
- Decrease the amount of runtime repository data to backup. With less database maintenance as a consequence.
- Minimize the risk to reach maximum database and tablespace limits.

Blobs should not be stored on disk:

- If you intend to share the queue between several StreamServer applications.
- When using StreamStudio Reporter.
- When using StreamStudio Collector.

## Status Messenger

The `readystatusevent` is enhanced with two new parameters:

- Update – Updates the status of top jobs (default true).
- Report – Reports and consumes the updated status (default true).

When you use Status Messenger, you must make sure that the updated job status information is not consumed by any other application in the application domain. You do this by disabling the report function for the other applications.

For more information, see the *Database Guidelines*.

## StreamStudio

For StreamStudio Composition Center, see [Correspondence Management](#) on page 10.

## StreamStudio Collector

### Document metadata syntax changed

The syntax for document metadata is changed. This affects the `GetHeaderValue` scripting function, used when retrieving document metadata.

## StreamStudio Composer

### Metadata identifier

In previous versions renaming of metadata damaged texts and rules. The reason was that the metadata name was used as the identifier.

In Persuasion SP5, GUIDs (Global Unique Identifiers) are used and it is possible to rename metadata without damaging texts and rules.

## XMLIN tool

### Option Filter input before opening sample

A new option **Filter input before opening sample** is added in the Sample tab.

The option is used to filter the sample file before opening the sample in the XMLIN tool.

If the sample is a `*.xsf` file (SAP connectivity pack only), an XSF filter is used as filter. The XSF filter GUI is launched when you open the sample file, and in this GUI you must specify the appropriate filter parameters.

If the sample is any other type of file, you must use a custom filter executable, e.g. a Pearl script. The External filter is launched when you open the sample file, and in this filter you must specify the external command to use. This command is either the full path to the filter executable, or the name of the filter executable if this executable is included in the Path environment variable.

See the *XMLIN* documentation.

# User documentation

## StreamServe help

### Public StreamServe help

StreamServe help is available as web help, accessible over internet. When you select **Help** from a menu or press F1, the web help will open in a separate browser.

If you wish to run the help locally on your computer, you must download the help package from StreamShare (<http://streamshare.streamserve.com>) and unzip it to:

```
<StreamServe>\Applications\StreamSever\<Version>\Common\  
OnlineHelp
```

StreamServe is by default running web help. If you change the setting to run local help (in Design Center Settings dialog box), and then select **Help** or F1, an instruction is displayed on how to install local help.

### Changes to help content

In previous versions the following documents were only published as PDF files. From Persuasion SP5 they are also included in StreamServe help:

- Installation Guide
- Supported Platforms and Software
- StreamStudio Administrator's Guide

You find them in StreamServe help under the Installation and administration section.

## StreamStudio help

The help for StreamStudio web applications is collected into one common traditional help system with table of contents, search and content panes.

This will make it possible to search through all StreamStudio web application help files.