# Nirva PRINTNET Service

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# **Document versions**

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# Overview

The PRINTNET service is a NIRVA external service that allows the communication to the GMC PRINTNET T document composition engine, call "PRINTNET" in the remainder document.

More information on PRINTNET T Product is available on http://www.gmc.net

It provides functionality to simplify the deployment and production steps of a document composition project.

Through the NIRVA connectors, it also allows easy integration of document composition into external applications or environments.

The NIRVA PRINTNET service manages:

- PRINTNET T engine versions
- Production workspaces
- PRINTNET T workflow repositories
- Document composition

## Versions

The service provides the management of PRINTNET T engine versions. PRINTNET T engines are executables that realize the composition step according to parameters and information provided in one or several input files and in a configuration file called "workflow". The workflow file is generated by the PRINTNET T tools.

A PRINTNET T workflow file is often linked to a specific engine version. That's why it's important to manage the PRINTNET T engine versions for production.

## **NIRVA PRINTNET service workspaces**

A workspace represents an environment of a given application. For example, for a given application or set of applications, one could wish to create three environments: one for development, one for testing and another



for production. These workspaces are named objects that include the composition workflow and document repositories. The number of workspaces is not limited.

The workspace can be exported and installed across platforms even if the target platforms are not using the same operating system. One can for example create a workspace under a windows platform and install it on a Linux platform.

The workspace greatly facilitates the deployment of document production applications.

When a composition run is launched, the NIRVA user has to specify the name of the workspace to use.

The workspace feature is very useful for separating production environments from testing ones or in the case of an outsourcing NIRVA platform.

When the NIRVA PRINTNET service is installed, the list of workspaces is available in the Nirva configuration tool, in the System/Services/PrintNet menu.

### Workflows

The NIRVA PRINTNET service provides a repository of PRINTNET workflows. A PRINTNET workflow is a binary file created with PRINTNET tools that contains all the necessary configuration information for the PRINTNET engine to run the composition, for one or several document formats.

### **Documents**

The NIRVA PRINTNET service provides, for each Workspace, a repository of the documents available for composition.

The document is the only thing that the user of the service is interested with. When the composition is requested to NIRVA, NIRVA retrieves the corresponding PRINTNET workflow in its workflow repository and runs the composition.

## Composition

NIRVA can start the composition of a document with a single command. The composition run can be based on one or several entry files. The format of these entry files must be recognized by PRINTNET. The composition run will then be able to deliver one ore several output files. For example, a document can be defined to be produced in PDF format, after the reception of two input files: one containing data and another containing some extra parameters (logo display, type of chart, etc.). The input and output files are NIRVA file objects. The NIRVA PRINTNET service manages the mappings between NIRVA object names and the input and output modules of PRINTNET T workflows.

# **Output formats**

The following formats supported b y PRINTENT T and the Nirva PRINTET Service are:

- AFP
- Adobe Postscript 3
- CreoVPS
- HP PPML
- IJPDS
- Metacode
- PCL
- PDF
- PodiPPML
- SimpleHTML
- Text
- VIPP

# Installation

The NIRVA PRINTNET service is a standard NIRVA package and can thus be installed like any other NIRVA service, using the NIRVA configuration web pages. Please refer to the NIRVA configuration chapter in the NIRVA user's guide for further information.

# Configuration

The NIRVA PRINTNET service configuration is entirely dynamic and available from a web browser.

The configuration of the NIRVA PRINTNET service is accessible directly from the main list of services of the NIRVA configuration tool:

ystem	Back	Refresh In	stall Mount Skeleton					Service
Information	Name		Description	Status		Multithread	Language	Sessions
Parameters		DATABASE	DATABASE NIRVA service	🖌 Ru	nning	Yes	C++	<u>6</u>
Sessions		DATETIME	DATETIME NIRVA service	V Ru	nning	Yes	Java	0
Services		DCIL	DCIL NIRVA service	🗙 Ste	opped	Yes	Java	0
pplications	1	FILTER	FILTER NIRVA service	V Ru	nning	Yes	C++	0
Veb services		KIPAS	KIPAS NIRVA service	🗙 Sto	opped	Yes	Java	0
		PDF	PDF NIRVA service	V Ru	nning	Yes	C++	0
icenses		PILOT	NIRVA PILOT piloting service	V Ru	nning	Yes	Java	0
ocumentation	1	PRINTNET	PRINTNET NIRVA service	🖌 Ru	nning	Yes	C++	1
istallation Security	E Con	figure the PRINTNET	service TORAGE NIRVA service	🖌 Ru	nning	Yes	C++	0

When choosing the configuration icon of the NIRVA PRINTNET service (III), it starts the NIRVA PRINTNET service configuration by displaying the list of NIRVA PRINTNET service workspace:

	► System	<ul> <li>Application</li> </ul>	► Password	► Logout	
System	Back Re	resh Engines	New Import	Documentation	Workspaces
Information					
Parameters	Name	PNV		Description Printnet Nirva	Taat
Sessions		Januar Martin			
Services	State of the second	test		First workspa	
Applications		test2		Second works	space test
Web services					
Queues					
Licenses					
Documentation					
Installation					
Security					
Registry					
Locking					
Semaphores					
Threads					
Logs					

# Engine versions

The engine management is available by clicking on the "Engines" button from the workspace list page.



This window displays the list of the mounted versions of PRINTNET engines. The NIRVA PRINTNET service doesn't install any PRINTNET engine, but refers to the installed ones.

A PRINTNET engine is a single executable. As an example, the windows system engine name is: "PNeTC.exe" for version 5 of PRINTNET.

The "Workspaces" button can be used to come back to the workspaces list.

### Registering a new engine version

Registering a new engine is done by clicking the button "New". It displays the following screen:

System	Back Documentation	New engine entry
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	Engine version : Engine executable path : Cancel Add engine entry	

The engine version is mandatory. It's case independent. The version number that the NIRVA PRINTNET service uses to specify an engine is independent of the real PRINTNET version number. However, it is highly recommended to choose a fixed-length for the version string and to use figures and dots only and coherent

with the real PRINTNET T version. This way, it is possible to force NIRVA to automatically choose the most recent engine when running a composition. NIRVA defines the newest version after an alphabetical sort.

The "Engine executable path" parameter must point to the PRINTNET engine command line. One can add some PRINTNET specific extra parameters to the command line. Generally, this is not necessary because the complete command line is built by the Nirva service, at composition time. NIRVA processes this way: it takes the command line as defined here above in the configuration tool and adds to it the necessary parameters pointing to input and output files.

### Removing an engine entry

Removing an engine entry is quite simple. In the engine list, select the <sup>12</sup> icon next to the engine version. The configuration tool will request a confirmation and try to remove the engine: for doing that it will internally wait for 10 seconds for the engine to be free. Only free engines can be removed.

If the engine cannot be removed within 10 seconds, an error message is displayed. In this case, the order to remove must be given again or a manual ENGINE:REMOVE command must be sent with a WAIT parameter set to a value greater than 10. See the <u>command reference</u> chapter for further information about the ENGINE:REMOVE command.

The removal only concerns the entry in the internal service list. The command doesn't physically remove any PRINTNET file.

### Changing engine entry parameters

To change the engine entry parameters, just select the 🔲 icon near the engine version in the engine list. It displays the following window:

<b>NIRVA</b>	► System ► Application	► Password ► Logout	
System	Back Documentation		Change engine V5_5 parameters
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	Engine executable path :	C/Program Files/PrintNet T Triple Suite 5	5.0/PNetTC.exe

The engine version cannot be changed from this window. The only way to change the engine version is to remove the engine entry and to create it again.

# Workspaces

The list of available workspaces is displayed automatically when entering the configuration of the NIRVA PRINTNET service:



### Creating a new workspace

A new workspace can be created by clicking on the button "New". It displays the following screen:

	► System ► Application ► Password ► Logout	
System Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	Back       Documentation         Workspace name :	New workspace

The workspace name is mandatory. It is case independent and can contain spaces.

The "Default engine version" parameter is optional. It gives the default PRINTNET engine version for this workspace. It must be an installed PRINTNET engine version.

### Removing a workspace

Removing a workspace is quite simple. Select the <sup>Sol</sup> icon near the workspace name in the workspace list. The configuration tool will request a confirmation and try to remove the workspace: for doing that it will internally wait for 10 seconds for the workspace to be free. Only free workspaces can be removed.

If the workspace cannot be removed within 10 seconds, an error message is displayed. In this case, the order to remove the workspace must be given again or a manual WORKSPACE:REMOVE command must be sent with a WAIT parameter set to a value greater than 10. See the command reference chapter for further information about the WORKSPACE:REMOVE command.

### Changing workspace parameters

To change the workspace parameters, select the 💷 icon next to the workspace name in the workspace list. It displays the following window:

	► System ► Application	► Password ► Logout	
System	Back Documentation		Change workspace test parameters
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	Description : Default engine version :	First workspace test V5_5 V5_5 Cancel Update	

The only way to change the workspace name is to remove the workspace and to create it again.

### Exporting a workspace

The workspace export command is used for workspace deployment. An exported workspace is a single file containing the entire workspace including document definitions and PRINTNET workflows.

Exporting a workspace is done by selecting the  $\blacksquare$  icon next to the workspace name in the workspace list. You are then prompted to locally download the workspace:

### Importing a workspace

The installation of a workspace can be done by importing it. To do that, click on the "Import" button above the workspace list. It displays the following window:

From technology to business	► System ► Application ► Password ► Logout	
System	Back Documentation	Import workspace
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	Workspace name : Import file : Cancel Import workspace	Parcourir

The workspace name is generally taken directly from the workspace imported file but it can be changed. For example, this is useful to install another version of the same workspace for testing purposes.

The import file must point to your local workspace file. This can only be a file that has previously been created by the workspace export command.

### Editing a workspace

By clicking on the workspace name, one can edit the workspace. It gives access to the defined documents and workflows of the workspace.

## **Documents**

The documents are defined at workspace level. All the documents to be used later in document composition must be defined here.

This then displays the following screen:

NIRVA from technology to businese	► System	► Application ► Pass	word   Logout		
System	Back R	efresh Workspaces Pne	et Workflows New Documentation	n Workspace t	est documents
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads	Name	monpremierdoc test	Description First document test Test document	Pnet Workflow monpremierwf monpremierwf	Format PDF AFP

This is the list of current defined documents. For each document the list gives the following information:

Item	Description
Name	The document name. It is case independent.
Description	Optional description of the document.
PNetWorkflow	Name of the PrintNet workflow
Format	The default format for the output document

### Creating a new document

Creating a new document is done by clicking on the button "New" on the document list screen. This displays the following screen:

In the child of the second sec	► System ► Appli	cation ► Password	► Logout	
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry	Back Documentation Document name : Description: Associated PNet Workflow: Output format: Input file map: Output file map:			
Locking Semaphores Threads Logs				



The document name is case independent. If the user attempts to create a document with the name of an existing one, the command fails. The document name is mandatory.

The document description is a simple string that describes the document. It is not mandatory.

The associated workflow is the name of the PRINTNET workflow that processes the document. The workflow must have been previously defined in the workflow list. Output format is the default output format for the document.

Input file map is a collection of strings separated by a semicolon character that gives the mappings between NIRVA file objects and PRINTNET input modules. Each string has the following format: *NirvaObject:PrintNetModule* where *NirvaObject* is the name of the NIRVA file object containing the input file and *PrintNetModule* is the name of the PRINTNET input module. If the NirvaObject is given alone, the PRINTNET input module is supposed to have the same name.

If *PrintNetModule* is set to "NV\_DYNAMIC\_PNETWORKFLOW", Nirva considers the input file as a dynamic workflow and sends the file to PRINTNET as a workflow instead of as a module name.

Output file map is a collection of strings separated by a semicolon character that gives the mapping between NIRVA file objects and PRINTNET output modules. Each string has the following format: *NirvaObject:PrintNetModule(OutputFormat)* where *NirvaObject* is the name of the NIRVA file object containing the output file, *PrintNetModule* is the name of the PRINTNET module for the output and *OutputFormat* is the output file format. If the NirvaObject is given alone, the PRINTNET oputput module is supposed to have the same name. If the OutputFormat is omitted, NIRVA uses the default output format defined for this document. See paragraph Output formats for the list of supported output formats.

### **Removing a document**

Removing a document is quite simple. Select the <sup>Select</sup> icon next to the document name in the document list. The configuration tool will request a confirmation and try to remove the document (if not in use).

### Changing document parameters

To change the document parameters, just select the 🔲 icon next to the document name in the document list. It displays the following window:

All the document parameters can be changed except its name.

Please refer to the "Creating a new document" chapter for a description of document parameters.

### Testing a document

It is possible to test the composition of a document by pressing the  $\checkmark$  icon next to its name from the document list. The displayed window depends on the file maps defined for the document. There is one requested input file for each defined input file map. Here is an example with a single input file object named "IN":

Tram technology to business	System      ► Application      ► Password      ► Logout	
System	Back Documents Documentation	Test monpremierdoc document
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	INCLIENTS : INTRANSAC : Cancel Compose Log	Parcourir

When the input file object is named "IN", Nirva displays the text "Input file" instead of "IN".

For each input file, one must give a local file name for tests and press the "Compose" button to test the composition.

The "Log" check box also allows displaying the PRINTNET log file. If the composition is successful, NIRVA displays the list of output files:

The MIRVA	► System     ► Application     ► Password     ► Logout	
System	Back Documents Documentation	Test monpremierdoc document
Information Parameters Sessions Services Applications	INCLIENTS : C:\Documents and Settings\externe\Bureau\printnet\FIIIF_Clients.csv INTRANSAC : C:\Documents and Settings\externe\Bureau\printnet\FIIIF_Stocks.csv Cancel Compose Log	Parcourir
Web services Queues	Results	
Licenses Documentation Installation Security Registry Locking	File Extension OUT pdf message bt	Size 1020141 1425
Semaphores Threads Logs		

The output files can then be displayed (or downloaded) by clicking on their name. The name of the output file is the name of the created Nirva object (as defined in the output file map for this document).

## Workflows

The workflows are defined at workspace level. NIRVA maintains a PRINTNET workflow repository for each workspace.

The workflow list is available from the document list by clicking on the "Workflows" button. It displays the following screen:

### Creating a new workflow

Creating a new workflow can be done by clicking on the button "New". It displays the following screen:

NIRVA	► System ► Application ► Password ► Logout	
System	Back Documentation	New PNet Workflow
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	Pnet Workflow name : Description : Engine version : Pnet Workflow file : Cancel Add PNet Workflow	Parcourir

The workflow name is mandatory. It is case independent and can contain spaces.

The "Engine version" parameter is optional. It gives the PRINTNET engine version to use for this workflow. It must be an installed PRINTNET engine version. If not given, NIRVA will use the default engine version of the workspace or will try to get the last one.

"Workflow file" must point to the real PRINTNET workflow file. NIRVA then uploads it in its workflow repository. It can be done at workflow creation time but later as well.

### Removing a workflow

Removing a workflow is quite simple. Select the <sup>2</sup> icon next to the workflow name in the workflow list. The configuration tool will request a confirmation and try to remove the workflow: For doing that it will internally wait for 10 seconds for the workflow to be free. Only free workflows can be removed.

If the workflow cannot be removed within 10 seconds, an error message is displayed. In this case, the order to remove must be given again or a manual PNETWORKFLOW:REMOVE command must be sent with a WAIT parameter set to a value greater than 10. Please refer to the <u>command reference</u> chapter for further information about the PNETWORKFLOW:REMOVE command.

### Changing workflow parameters

To change the workflow parameters, Select the 🔲 icon next to the workflow name in the workflow list. It displays the following window:

Trom technology to business	► System ► /	Application ► Password	► Logout			
System	Back Documen	tation	Change Pl	Net Workflow	monpremierw <mark>f</mark> para	meters
Information Parameters Sessions Services Applications Web services Queues Licenses Documentation Installation Security Registry Locking Semaphores Threads Logs	Description : Engine version : Pnet Workflow file :	First workflow test V5_5 V5_5 Cancel Update			Parcourir_	

The workflow name cannot be changed this way. The only way to change the workflow name is to remove the workflow and to create it again.

The workflow file will be updated only if a new file is given.

# Reference

This chapter gives the complete reference of all the PRINTNET service commands.

# Classes

Here are the available PRINTNET service classes:

Class	Description
PRINTNET	Main class.
ENGINE	PRINTNET engine version management.
WORKSPACE	Workspace management.
PNETWORKFLOW	PRINTNET workflow repository management.
DOCUMENT	Document management.

# **Error codes**

### **COMMAND** Class

Value	Description
101	Invalid command

### **DOCUMENT Class**

Value	Description
101	Document not found
102	The document already exists
103	Cannot create the document
104	No document name given
105	Input file missing
106	No output file
108	Error in composition

### **ENGINE Class**

Value	Description
101	Cannot save the engine list
102	Engine not found
103	The engine entry already exists
104	Cannot create the engine entry
105	No engine version given
106	The engine is in use
107	Cannot get PrintNet engine

### **PNETWORKFLOW Class**

Value	Description

Value	Description
101	Workflow not found
102	The workflow already exists
103	Cannot create the workflow
104	No workflow name given

### WORKSPACE Class

Value	Description
101	Cannot save the workspace list
102	Workspace not found
103	The workspace already exists
104	Cannot create the workspace
105	No workspace name given
106	The workspace is in use
107	Cannot save workspace information to registry
108	Cannot export workspace to file
109	Cannot import workspace from file

### Permissions

Name	Description
ADMIN	Administration (update mode)

# Commands

For each command, the reference gives the command name, the sources from which the command may be used, the command description, the eventual command permissions, the parameter list and the eventual list of objects created by the command.

The parameters described in this chapter are command specific parameters. For general parameters, please refer to the Nirva command syntax chapter.

The available command sources are:

Source	Description
CLIENT	All Nirva client interfaces including Nirva client library (nvc)
WEB	Commands from a web browser.
PROCEDURE	Commands from a Nirva procedure.
SERVICE	Commands from service to service.

### **PRINTNET class**

This is the standard service class. It only provides just one command, for testing purpose.

#### NOP

#### PRINTNET : PRINTNET : NOP

Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

#### Example Usage

NV\_CMD= | PRINTNET: PRINTNET: NOP |



#### Description

This command does not do anything but allows to test that the NIRVA PRINTNET service is online and answers correctly.

If the service is not online, this command returns an error.

#### Parameters

None

#### **DOCUMENT class**

The DOCUMENT class provides commands to manage the document repositories and to launch the composition.

The document is the only matter that the user of the service is interested with. When running the composition, a user gives the name of the workspace and the document to compose to NIRVA. NIRVA gets the corresponding PRINTNET workflow in its workflow repository and does the composition.

#### COMPOSE

#### PRINTNET:DOCUMENT:COMPOSE

Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

#### **Example Usage**

```
NV_CMD=|PRINTNET:DOCUMENT:COMPOSE| ENGINE=|pnetV5| WORKSPACE=|myWorkspace|
DOCUMENT=|myDocument|
```

#### Description

This command does the composition of a document by launching the PRINTNET engine.

The purpose of the NIRVA PRINTNET service is to simplify the composition step without having to take care about PRINTNET workflow and engines.

nirva

For doing that, the COMPOSE command can be used by giving the following parameters only: the input files, the workspace name and the document name to compose.

The COMPOSE command creates output file objects in the output container. The object names are defined by the output file maps of the document. For example, if the output file map has been defined as OUT:OUTPDF(PDF);OUT2:OUTAFP(AFP), the command will generate two file objects named "OUT" and "OUT2". The attached file for these file objects have an extension corresponding to their defined format.

#### Parameters

Name	Description
WORKSPACE	Workspace name. This parameter is mandatory.
DOCUMENT	Document name. This parameter is mandatory.
ENGINE	Engine version. This parameter can be given to specify a PRINTNET engine version to use. If this parameter is not provided, NIRVA gets the engine version from the document associated workflow or, if not found, from the workspace default engine version parameter or, if not found, tries to evaluate the last engine version by alphabetically comparing the engine versions.
File maps	All the input file maps defined in the document parameters must be given as NIRVA file objects in the input container. For example, if the file map IN:INPUT has been defined, the IN file object must exist in the input container.
LOG	Keeps PRINTNET log information file or not. When this parameter is set to "YES", NIRVA creates an output file object named "MESSAGE" in the output container that gives log information about the PRINTNET process.
CREATE	Create mode. If one of the output file objects already exists, NIRVA doesn't create it again but changes the content of its associated file. One can force the object creation by setting the CREATE parameter to "YES". The default is "NO".
DIRECTORY	By default, NIRVA creates the output file objects in the application work directory. It can be changed by setting this parameter to the name of a directory.
EXTENSION	The created object file extensions are automatically set by the command following the required output formats. It can be overridden by giving a specific extension in this parameter. At this time, if there is more than one output file, all the output files will have the given extension. If the dot character is omitted in the EXTENSION parameter, Nirva adds it.
PREFIX	The PREFIX parameter is used in the file name when NIRVA creates the file objects.

Name	Description
SUFFIX	The SUFFIX parameter is used in the file name when NIRVA creates the file objects.
ERROR_NOSIZE	By default, the command doesn't produce any error if one of the defined output file objects is empty. It can be changed by setting the ERROR_NOSIZE parameter to "YES". In this case, if any of the output files is empty, the command returns an error.
EXTRA_PARAM	Other printnet command line arguments. The EXTRA_PARAM parameter allows sending other arguments by adding them to the PRINTNET engine command line. The value of EXTRA_PARAM is simply added at the end of the PRINTNET command line.

### Objects created

Name	Description
Output files	The COMPOSE command creates output file objects in the output container. The object names are defined by the output file maps of the document. For example, if the output file map has been defined as OUT:OUTPDF(PDF);OUT2:OUTAFP(AFP), the command will generate two file objects named "OUT" and "OUT2". The attached files for these file objects have an extension corresponding to their defined format (".pdf" and ".afp" in this example).
OBJECTS	List of created file objects. It is a Nirva table object containing the following columns: NAME : file object name FILENAME associated file name EXTENSION : file extension SIZE of the file

### COMPOSE\_DIRECT

### PRINTNET:DOCUMENT:COMPOSE\_DIRECT



Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

#### **Example Usages**

NV\_CMD=|PRINTNET:DOCUMENT:COMPOSE\_DIRECT| ENGINE=|pnetV5| WFDFILE=|myWorkflowFile| FORMAT=|pdf| FILEMAPIN=|IN:Clients;DATA:Parameters| FILEMAPOUT=|OUT:Output1|

#### Description

This command is similar to the COMPOSE command but doesn't use the workspace, workflow and document repositories of the NIRVA PRINTNET service. All the composition parameters must then be given in the command.

The COMPOSE\_DIRECT command creates output file objects in the output container. The object names are defined by the output file maps of the document. For example, if the output file map has been defined as OUT:OUTPDF(PDF);OUT2:OUTAFP(AFP), the command will generate two file objects named "OUT" and "OUT2". The attached file for these file objects have an extension corresponding to their defined format

#### Parameters

Name	Description
ENGINE	Engine version. This parameter can be given to specify a PRINTNET engine version to use. If this parameter is not provided, NIRVA gets the engine version from the document associated workflow or, if not found, from the workspace default engine version parameter or, if not found, tries to evaluate the last engine version by alphabetically comparing the engine versions.
WFDFILE	PrintNet Workflow file. This is the name of a NIRVA file object containing the PRINTNET Workflow file. The object must exist and point to the Workflow file. The default value of WFDFILE is "WFDFILE".
FORMAT	Default output format for the document. See the FILEMAPOUT parameter for information about output formats. See paragraph Output formats for the list of supported formats.

Name	Description
FILEMAPIN	Input file maps. This parameter is a collection of strings separated by a semicolon character and giving the mapping between NIRVA file objects and PRINTNET input modules. Each string has the following format: <i>NirvaObject.PrintNetModule</i> where <i>NirvaObject</i> is the name of the NIRVA file object containing the input file and <i>PrintNetModule</i> is the name of the PRINTNET module for this input. If the NirvaObject is given alone, the PRINTNET module is supposed to have the same name.
FILEMAPOUT	Output file maps. This parameter is a collection of strings separated by a semicolon character and giving the mapping between NIRVA file objects and PRINTNET output modules. Each string has the following format: <i>NirvaObject</i> . <i>PrintNetModule</i> ( <i>OutputFormat</i> ) where <i>NirvaObject</i> is the name of the NIRVA file object containing the output file, <i>PrintNetModule</i> is the name of the PRINTNET module for this output and <i>OutputFormat</i> is the output file format.
File maps	All the input file maps defined in the document parameters must be given as NIRVA file objects in the input container. For example, if the file map IN:INPUT has been defined, the IN file object must exist in the input container.
SLAVEMAP	Maps between external slave workflows and external modules. This parameter is a collec- tion of strings separated by a semicolon character which gives the mapping between PNETWorkflows declared with the service and PRINTNET external modules of the mas- ter Workflow. Each string has the following format: <i>PNetWorkflowName:PrintNetModule</i> where <i>PNetWorkflowName</i> is the name of the PnetWorkflow as it appears in the service configuration and <i>PrintNetModule</i> is the name of the PRINTNET module for this workflow in the master workflow. If the <i>PNetWorkflowName</i> is given alone, the PRINTNET module is supposed to have the same name.
LOG	Keeps PRINTNET log information file or not. When this parameter is set to "YES", NIRVA creates an output file object named "MESSAGE" in the output container that gives log information about the PRINTNET process.
CREATE	Create mode. If one of the output file objects already exists, NIRVA doesn't create it again but changes the content of its associated file. One can force the object creation by setting the CREATE parameter to "YES". The default is "NO".
DIRECTORY	By default, NIRVA creates the output file objects in the application work directory. It can be changed by setting this parameter to the name of a directory.
EXTENSION	The created object file extensions are automatically set by the command following the required output formats. It can be overridden by giving a specific extension in this parameter. At this time, if there is more than one output file, all the output files will have the given extension. If the dot character is omitted in the EXTENSION parameter, Nirva adds it.

Name	Description
PREFIX	The PREFIX parameter is used in the file name when NIRVA creates the file objects.
SUFFIX	The SUFFIX parameter is used in the file name when NIRVA creates the file objects.
ERROR_NOSIZE	By default, the command doesn't produce any error if one of the defined output file objects is empty. It can be changed by setting the ERROR_NOSIZE parameter to "YES". In this case, if any of the output files is empty, the command returns an error.
EXTRA_PARAM	Other printnet command line arguments. The EXTRA_PARAM parameter allows sending other arguments by adding them to the PRINTNET engine command line. The value of EXTRA_PARAM is simply added at the end of the PRINTNET command line.

### Objects created

Name	Description
Output files	The COMPOSE command creates output file objects in the output container. The object names are defined by the output file maps of the document. For example, if the output file map has been defined as OUT:OUTPDF(PDF);OUT2:OUTAFP(AFP), the command will generate two file objects named "OUT" and "OUT2". The files attached to these file objects will have an extension corresponding to their defined format (".pdf" and ".afp" in this example).
OBJECTS	List of created file objects. It is a Nirva table object containing the following columns: NAME : file object name FILENAME associated file name EXTENSION : file extension SIZE of the file

### CREATE

#### PRINTNET:DOCUMENT:CREATE



Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

#### **Example Usages**

NV\_CMD=|PRINTNET:DOCUMENT:CREATE| WORKSPACE=|myWorkspace| DOCUMENT=|myFirstDocument| PNETWORKFLOW=|myWorkflow|

#### Description

This command creates a new document entry in the document repository of the associated workspace.

#### Permissions

ADMIN

#### Parameters

Name	Description	
WORKSPACE	Workspace name. This parameter is mandatory.	
DOCUMENT	Document name. This parameter is mandatory.	
DESCRIPTION	Document description. This is a free text that describes the document. Not mandatory.	
PNETWORKFLO W	Name of the PrintNet workflow that processes this document. It must be an existing workflow defined in the workflow repository of the same workspace.	
FORMAT	Default output format for the document. See paragraph Output formats for the list of supported formats.	

Name	Description
FILEMAPIN	Input file maps. This parameter is a collection of strings separated by the semicolon character and giving the mapping between NIRVA file objects and PRINTNET input modules. Each string has the following format: <i>NirvaObject:P:rintNetModule</i> where <i>NirvaObject</i> is the name of the NIRVA file object containing the input file and <i>P:rintNetModule</i> is the name of the PRINTNET input module. If the <i>NirvaObject</i> is given alone, the PRINTNET module is supposed to have the same name. If <i>P:rintNetModule</i> is set to "NV_DYNAMIC_PNETWORKFLOW", Nirva considers the input file as a dynamic workflow and sends the file to PRINTNET as a workflow instead of as a module.
FILEMAPOUT	Output file maps. This parameter is a collection of strings separated by the semicolon character and giving the mapping between NIRVA file objects and PRINTNET output modules. Each string has the following format: <i>NirvaObject: P:rintNetModule</i> ( <i>OutputFormat</i> ) where <i>NirvaObject</i> is the name of the NIRVA file object containing the output file, <i>P:rintNetModule</i> is the name of the PRINTNET module for the output and <i>OutputFormat</i> is the output file format. If the NirvaObject is given alone, the PRINTNET module is supposed to have the same name. If the OutputFormat is omitted, NIRVA uses the default output format (FORMAT parameter) defined for this document. See paragraph Output formats for a list of output formats.
SLAVEMAP	Maps between external slave workflows and external modules. This parameter is a collection of strings separated by a semicolon character which gives the mapping between PNETWorfklows declared with the service and PRINTNET external modules of the master Workflow. Each string has the following format: <i>PNetWorkflowName</i> : <i>PrintNetModule</i> where <i>PNetWorkflowName</i> is the name of the PnetWorkflow as it appears in the service configuration and <i>PrintNetModule</i> is the name of the PRINTNET module for this workflow in the master workflow. If the <i>PNetWorkflowName</i> is given alone, the PRINTNET module is supposed to have the same name.
WAIT	Waiting time for the workspace to be free: in seconds. To create a new document entry, the PRINTNET service must wait for the workspace to be free. This parameter allows defining the maximum waiting time. If the workspace is still in use after the waiting time, the command fails. A value of 0 means: wait indefinitely. The default is "10"

#### INFO

#### PRINTNET:DOCUMENT:INFO

Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

#### Example Usages

NV\_CMD=|PRINTNET:DOCUMENT:INFO| WORKSPACE=|myWorkSpace| DOCUMENT=|myDocument|

#### Description

This command is similar to the COMPOSE command but doesn't use the workspace, workflow and document repositories of the PRINTNET service. All the composition parameters must then be given in the command.

The COMPOSE\_DIRECT command creates output file objects in the output container. The object names are defined by the output file maps of the document. For example, if the output file map has been defined as OUT:OUTPDF(PDF);OUT2:OUTAFP(AFP), the command will generate two file objects named "OUT" and "OUT2". The attached file for these file objects have an extension corresponding to their defined format

#### Parameters

Name	Description
WORKSPACE	Workspace name. This parameter is mandatory.
DOCUMENT	Document name. This parameter is mandatory.

#### **Objects created**

Name	Description
------	-------------

Name	Description
DOCUMENT_INF	An INDSTRINGLIST object containing the following keys :
0	"NAME" is the document name
	"DESCRIPTION" is the document description."NAME" is the document name.
	"DESCRIPTION" is the document description.
	"PNETWORKFLOW" is the name of the associated workflow
	"FORMAT" is the default output format. It can be blank. See paragraph Output formats for the list of supported formats.
	"FILEMAPIN" is the input file maps. It is a collection of strings separated by the semicolon character and giving the mapping between NIRVA file objects and PRINTNET input modules. Each string has the following format: NirvaObject:PrintNetModule where NirvaObject is the name of the NIRVA file object containing the input file and PrintNetModule is the name of the PRINTNET module for the input.
	"FILEMAPOUT" is the output file maps. It is a collection of strings separated by a semicolon character and giving the mapping between NIRVA file objects and PRINTNET output modules. Each string has the following format: NirvaObject:PrintNetOutModule(OutputFormat) where NirvaObject is the name of the NIRVA file object containing the output file, PrintNetOutModule is the name of the PRINTNET module for this output and OutputFormat is the output file format. The output file format can be blank. If the output file format is blank, the parentheses are omitted. See paragraph Output formats for the list of supported formats.
	"SLAVEMAP" maps external slave workflows to external modules of the master workflow. This parameter is a collection of strings separated by a semicolon character which gives the mapping between PNETWorfklows declared with the service and PRINTNET external modules of the master Workflow. Each string has the following format: <i>PNetWorkflowName</i> : <i>PrintNetModule</i> where <i>PNetWorkflowName</i> is the name of the PnetWorkflow as it appears in the service configuration and <i>PrintNetModule</i> is the name of the PRINTNET module for this workflow in the master workflow. If the <i>PNetWorkflowName</i> is given alone, the PRINTNET module is supposed to have the same name.
	"ENGINE" is the engine version eventually associated to the document.

### LIST

PRINTNET:DOCUMENT:LIST



Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

#### **Example Usages**

NV\_CMD=|PRINTNET:DOCUMENT:LIST| WORKSPACE=|myWorkSpace|

#### Description

This command returns the list of the PRINTNET service documents. The command creates a table object returning the following document information:

Name

Description

Associated PrintNet Workflow

Default output format

Input File Map

Output File Map

#### Parameters

	Name	Description
wo	RKSPACE	Workspace name. This parameter is mandatory.

#### **Objects created**

Name Description
------------------

Name	Description
DOCUMENT_INFO	It is a Nirva table object containing following columns:
	"NAME" is the document name
	"DESCRIPTION" is the document description.
	"PNETWORKFLOW" is the name of the associated workflow
	"FORMAT" is the default output format. It can be blank. See paragraph Output formats for the list of supported formats.
	"FILEMAPIN" is the input file maps. It is a collection of strings separated by the semicolon character and giving the mapping between NIRVA file objects and PRINTNET input modules. Each string has the following format: NirvaObject:PrintNetModule where NirvaObject is the name of the NIRVA file object containing the input file and PrintNetModule is the name of the PRINTNET module for the input.
	"FILEMAPOUT" is the output file maps. It is a collection of strings separated by a semicolon character and giving the mapping between NIRVA file objects and PRINTNET output modules. Each string has the following format: NirvaObject:PrintNetOutModule(OutputFormat) where NirvaObject is the name of the NIRVA file object containing the output file, PrintNetOutModule is the name of the PRINTNET module for this output and OutputFormat is the output file format. The output file format can be blank. If the output file format is blank, the parentheses are omitted. See paragraph Output formats for the list of supported
	"SLAVEMAP" maps external slave workflows to external modules of the master workflow. It is a collection of strings separated by a semicolon character which gives the mapping between PNETWorfklows declared with the service and PRINTNET external modules of the master Workflow. Each string has the following format: <i>PNetWorkflowName</i> : <i>PrintNetModule</i> where <i>PNetWorkflowName</i> is the name of the PnetWorkflow as it appears in the service configuration and <i>PrintNetModule</i> is the name of the PRINTNET module for this workflow in the master workflow. If the <i>PNetWorkflowName</i> is given alone, the PRINTNET module is supposed to have the same name.
	"ENGINE" is the engine version eventually associated to the document.

#### REMOVE

### PRINTNET:DOCUMENT:REMOVE

Source



Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

#### **Example Usages**

NV\_CMD=|PRINTNET:DOCUMENT:REMOVE| WORKSPACE=|myWorkSpace| DOCUMENT=|myDocument|

#### Description

This command removes an existing document from the NIRVA PRINTNET service documents list. This command may fail if the workspace is in use (see the WAIT parameter).

All information maintained by a document is removed by this command.

#### Permissions

ADMIN

#### Parameters

Name	Description
WORKSPACE	Workspace name. This parameter is mandatory.
DOCUMENT	Document name. This parameter is mandatory.
WAIT	Waiting time for the workspace to be free: in seconds. To create a new document entry, the PRINTNET service must wait for the workspace to be free. This parameter allows defining the maximum waiting time. If the workspace is still in use after the waiting time, the command fails. A value of 0 means: wait indefinitely. The default is "10".

### SET\_PARAM

#### PRINTNET:DOCUMENT:SET\_PARAM

Source Use input container Use output container
---


Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

### **Example Usages**

NV\_CMD=|PRINTNET:DOCUMENT:SET\_PARAM| WORKSPACE=|myWorkspace| DOCUMENT=|myFirstDocument| PNETWORKFLOW=|myWorkflow|

## Description

This command creates a new document entry in the document repository.

### Permissions

ADMIN

Name	Description	
WORKSPACE	Workspace name. This parameter is mandatory.	
DOCUMENT	Document name. This parameter is mandatory.	
DESCRIPTION	Document description. This is a free text that describes the document. Not mandatory.	
PNETWORKFLO W	Name of the PrintNet workflow that processes this document. It must be an existing workflow defined in the workflow repository of the same workspace.	
FORMAT	Default output format for the document. Please refer to the FILEMAPOUT parameter for information about output formats. See paragraph Output formats for the list of supported formats.	

Name	Description	
FILEMAPIN	<ul> <li>Input file maps. This parameter is a collection of strings separated by the semicolon character and giving the mapping between NIRVA file objects and PRINTNET input modules. Each string has the following format: NirvaObject:PrintNetModule where NirvaObject is the name of the NIRVA file object containing the input file and PrintNetModule is the name of the PRINTNET module for the input. If the NirvaObject is given alone, the PRINTNET module is supposed to have the same name.</li> <li>If PrintNetModule is set to "NV_DYNAMIC_PNETWORKFLOW", Nirva considers the input file as a dynamic workflow and sends the file to PRINTNET as a workflow instead of as a module.</li> </ul>	
FILEMAPOUT	Output file maps. This parameter is a collection of strings separated by the semicolon character and giving the mapping between NIRVA file objects and PRINTNET output modules. Each string has the following format: <i>Nir-vaObject</i> . <i>PrintNetModule</i> ( <i>OutputFormat</i> ) where <i>NirvaObject</i> is the name of the NIRVA file object containing the output file, <i>PrintNetModule</i> is the name of the PRINTNET module for the output and <i>OutputFormat</i> is the output file format. If the NirvaObject is given alone, the PRINTNET module is supposed to have the same name. If the OutputFormat is omitted, NIRVA uses the default output format (FORMAT parameter) defined for this document. See paragraph Output formats for the list of supported formats.	
SLAVEMAP	Maps between external slave workflows and external modules. This parameter is a collection of strings separated by a semicolon character which gives the mapping between PNETWorfklows declared with the service and PRINTNET external modules of the master Workflow. Each string has the following format: <i>PNetWorkflowName:PrintNetModule</i> where <i>PNetWorkflowName</i> is the name of the PnetWorkflow as it appears in the service configuration and <i>PrintNetModule</i> is the name of the PRINTNET module for this workflow in the master workflow. If the <i>PNetWorkflowName</i> is given alone, the PRINTNET module is supposed to have the same name.	
WAIT	Waiting time for the workspace to be free: in seconds. To create a new document entry, the PRINTNET service must wait for the workspace to be free. This parameter allows defining the maximum waiting time. If the workspace is still in use after the waiting time, the command fails. A value of 0 means: wait indefinitely. The default is "10".	

## **ENGINE class**

The ENGINE class provides commands for managing PRINTNET engine versions. One can create, remove, change or list engine versions.

The PRINTNET engine is an executable that does the composition step following information provided in one or several input files and a in configuration file named workflow.

The service doesn't provide the PRINTNET engines; they must be installed somewhere on the target machine. The NIRVA PRINTNET service only requires the pathnames of the engine executables.

## CREATE

## PRINTNET:ENGINE:CREATE

Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

## Example Usages

NV\_CMD=|PRINTNET:ENGINE :CREATE| VERSION=|myEngine| PATH=|myPath| KEY=|myKey|

## Description

This command creates a new engine entry in the NIRVA PRINTNET service engine list.

### Permissions

ADMIN

Name	Description
VERSION	Engine version. This parameter uniquely identifies an engine version. The engine version is mandatory. It is case independent. The version number used by the NIRVA PRINTNET service is independent from the real PRINTNET version number. It is though advised to choose a string containing only numeric digits and dots, always with the same number of digits because NIRVA can automatically choose the last engine version when running a composition. This is done by alphabetically sorting the version numbers. The VERSION parameter is mandatory. If an entry with the same version number already exists, the command fails.
PATH	Engine executable path. The PATH parameter must point to the PRINTNET engine command line. One can set some extra parameters to the executable. Generally, it is not necessary because the complete command line is built at composition time by the NIRVA service.

## INFO

## PRINTNET:ENGINE:INFO

Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

## Description

This command returns information about a specific engine entry.

### Parameters

Name	Description
VERSION	Engine version.

## **Objects created**

Name	Description	
ENGINE_INFO	An INDSTRINGLIST object containing the following keys :	
	"VERSION" is the engine version number.	
	"PATH" is the engine executable path.	

## LIST

## PRINTNET:ENGINE:LIST

Source Use input container Use output container	
---	--



Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

This command returns the list of PRINTNET service engine versions.

Name	Description	
ENGINE_LIST	It is a Nirva table object containing following columns :	
	Version.	
	Path.	
	Key.	

## **PNETWORKFLOW class**

The PNETWORKFLOW class provides commands for managing PRINTNET workflows. NIRVA maintains a repository of PRINTNET workflows for each workspace.

A PRINTNET workflow is a binary file created with PRINTNET tools that contains all the necessary configuration information for the PRINTNET engine to run the composition for one or several document.

The NIRVA PRINTNET service allows hiding the workflows to the final user, who is only interested with document.

## CREATE

### PRINTNET: PNETWORKFLOW: CREATE

Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

This command creates a new workflow entry in the workflow repository.

### Permissions

### ADMIN

### Parameters

Name	Description	
WORKSPACE	Workspace name. The workspace must exist.	
PNETWORKFLOW	Name of the PrintNet Workflow. This parameter uniquely identifies a PrintNet Workflow and is mandatory. It is case independent and can contain spaces. If a PrintNet Workflow with the same name exists, the command fails.	
DESCRIPTION	Workflow description. It is a free text that describes the workflow. Not mandatory.	
ENGINE	Engine version to use for the workflow. This parameter, if provided, must correspond to an existing engine entry in the engines list.	
WFDFILE	Workflow file. This is the name of a NIRVA file object containing the real PRINTNET Workflow file. If this object exists, NIRVA imports the file it points to as the workflow file.	
	The default value of WFDFILE is "WFDFILE"	
WAIT	Waiting time for the workspace to be free: in seconds. To create a new document entry, the PRINTNET service must wait for the workspace to be free. This parameter allows defining the maximum waiting time. If the workspace is still in use after the waiting time, the command fails.	
	A value of 0 means: wait indefinitely.	
	The default is "10".	

## INFO

## PRINTNET:PNETWORKFLOW:INFO

Source Use input container Use output container	
---	--



Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

This command returns information about a specific workflow.

## Parameters

Name	Description
WORKSPACE	Workspace name. The workspace must exist.
PNETWORKFLOW	Name of the PrintNet Workflow.

## Objects created

Name	Description
PNETWORKFLOW_ INFO	An INDSTRINGLIST object containing the following keys : <ul> <li>"NAME" is the workflow name.</li> </ul>
	<ul> <li>"DESCRIPTION" is the workflow description.</li> </ul>
	<ul> <li>"ENGINE" is the workflow engine version.</li> </ul>

## LIST

## PRINTNET:PNETWORKFLOW:LIST



Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

This command returns the list of PrintNet workflows declared to the NIRVA PRINTET service.

The command creates a table object containing the description of each workflow.

### Parameters

Name	Description
WORKSPACE	Workspace name. The workspace must exist.

## Objects created

Name	Description
PNETWORKFLO W_INFO	An INDSTRINGLIST object containing the following keys :     "NAME" is the workflow name.
	<ul><li> "DESCRIPTION" is the workflow description.</li><li> "ENGINE" is the workflow engine version.</li></ul>

## REMOVE

## PRINTNET:PNETWORKFLOW:REMOVE

Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		



This command removes an existing workflow from the PRINTNET workflow list. This command may fail if the workspace is in use (see the WAIT parameter).

All information related to the workflow is removed by this command including workflow files.

#### Permissions

ADMIN

### Parameters

Name	Description
WORKSPACE	Workspace name. The workspace must exist.
PNETWORKFLOW	Workflow name
WAIT	Waiting time in seconds for the workspace to be free. To remove a workflow, the NIRVA PRINTNET service must wait for its workspace to be free. This parameter allows defining the maximum waiting time. If the workspace is still in use after the waiting time, the command fails. A value of 0 means: wait indefinitely. The default is "10".

### SET\_PARAM

### PRINTNET:PNETWORKFLOW:SET\_PARAM

Source	Use input container	Use output container
CLIENT	YES	NO
WEB		
PROCED		
URE		
SERVICE		

### Description

This command changes the workflow parameters. The workflow must exist.

Any parameter can be changed except the workflow's name. If a parameter is not provided, its value is left unchanged. Also, if the workflow file cannot be found, or is found to be empty, the old file will be kept.

### Permissions

## ADMIN

### Parameters

Name	Description	
WORKSPACE	Workspace name. The workspace must exist.	
PNETWORKFLOW	Name of the PrintNet Workflow. This parameter uniquely identifies a PrintNet Workflow and is mandatory. It is case independent and can contain spaces. If a PrintNet Workflow with the same name exists, the command fails.	
DESCRIPTION	Workflow description. It is a free text that describes the workflow. Not mandatory.	
ENGINE	Engine version to use for the workflow. This parameter, if provided, must correspond to an existing engine entry in the engines list.	
WFDFILE	Workflow file. This is the name of a NIRVA file object containing the real PRINTNET Workflow file. If this object exists, NIRVA imports the file it points to as the workflow file. The default value of WFDFILE is "WFDFILE"	

## GET\_FILE

## PRINTNET:PNETWORKFLOW:GET\_FILE

Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

## Description

This command retrieves the PRINTNET workflow file.

### Parameters

Name	Description	
WORKSPACE	Workspace name. The workspace must exist.	
PNETWORKFLO W	Name of the PRINTNET Workflow. The workflow must exist.	
WFDFILE	Workflow file. It is the name of a NIRVA file object where the command must put the workflow file. If this object doesn't exist, NIRVA creates it. The default value of WFDFILE is "WFDFILE"	

### Objects created

Name	Description
<< WFDFILE >>	It is a Nirva file object containing the searched Workflow file

## WORKSPACE class

The WORKSPACE class provides commands for managing workspaces of the PRINTNET service. These are different form the workspaces offered by the PRINTNET itself.

A workspace encapsulates the entire necessary production environment for a dedicated application. A workspace is a named object that includes the workflow and document repositories.

## CREATE

## PRINTNET:WORKSPACE:CREATE

Source	Use input container	Use output container
CLIENT WEB PROCED URE SERVICE	NO	NO

## Description

This command creates a new workspace.

#### Permissions

### ADMIN

### Parameters

Name	Description	
WORKSPACE	Workspace name This parameter uniquely identifies a workspace. The workspace name is mandatory. It is case independent and can contain spaces.	
DESCRIPTION	Workspace description. This is a free text that describes the workspace. Not mandatory.	
DEF_ENGINE	Default engine version to use for the workspace. This parameter, if provided, must correspond to an existing engine entry in the engines list. Generally, the engine version to use is defined at workflow level but NIRVA can use the value given in this parameter when no engine is defined at workflow level.	

### EXPORT

### PRINTNET:WORKSPACE:EXPORT

Source	Use input container	Use output container
CLIENT	NO	YES
WEB		
PROCED		
URE		
SERVICE		

### Description

The export command saves all the workspace information into a single file including document and workflow repositories. It can be used in conjunction with the IMPORT command for deployment purposes.

### Permissions

ADMIN

### Parameters

Name	Description
WORKSPACE	Workspace name.
EXPORT	Name of the NIRVA file object that should contain the exported workspace. The default is "EXPORT". The command creates the file object in the output container.

## **Objects created**

Name	Description
EXPORT	NIRVA file object containing the exported workspace information. The name of the object can be changed using the EXPORT parameter.

### IMPORT

### PRINTNET:WORKSPACE:IMPORT

Source	Use input container	Use output container
CLIENT WEB PROCED URE SERVICE	NO	YES

### Description

The import command creates or changes the entire content of a workspace with the information given in an import file. The import file must be the result of a previous EXPORT command.

The workspace name is included into the workspace but can be changed by a dedicated parameter in order to create a copy of a workspace.

The workspace is created if it doesn't previously exist.

Permissions

ADMIN

### Parameters

Name	Description	
WORKSPACE	Workspace name.	
IMPORT	Name of the NIRVA file object containing the import file. The default is "IMPORT".	
WAIT	Waiting time for the workspace to be free: in seconds. This parameter has meaning only if the imported workspace already exists. At this time, the NIRVA PRINTNET service must wait for the workspace to be free. This parameter allows defining the maximum waiting time. If the workspace is still in use after the waiting time, the command fails. A value of 0 means: wait indefinitely.	
	The default is "10".	

## INFO

## PRINTNET:WORKSPACE:INFO

Source	Use input container	Use output container
CLIENT WEB PROCED URE SERVICE	NO	YES

## Description

This command returns information about a specific workspace.

Name	Description
WORKSPACE	Workspace name.

## **Objects created**

Name	Description
WORKSPACE_IN FO	An INDSTRINGLIST object containing the following keys :     "NAME" is the workspace name.
	<ul> <li>"DESCRIPTION" is the workspace description.</li> </ul>
	<ul> <li>"DEF_ENGINE" is the workspace default engine version.</li> </ul>

## LIST

## PRINTNET:WORKSPACE:LIST

Source	Use input container	Use output container
CLIENT WEB PROCED URE SERVICE	NO	YES

## Description

This command returns the list of the NIRVA PRINTNET service workspaces.

It creates a table object returning a description of the workspaces.

### Parameters

None

## **Objects created**

Name	Description
WORKSPACE_LIS	A TABLE object containing the following columns :
Т	<ul> <li>"NAME" is the workspace name.</li> </ul>
	<ul> <li>"DESCRIPTION" is the workspace description.</li> </ul>
	<ul> <li>"DEF_ENGINE" is the workspace default engine version.</li> </ul>

### REMOVE

## PRINTNET:WORKSPACE:REMOVE

Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

### Description

This command removes an existing workspace from the NIRVA PRINTNET service workspace list. This command may fail if the workspace is in use (see the WAIT parameter).

All information maintained by a workspace is removed by this command, document and workflow repositories included.

### Permissions

ADMIN

Name	Description
WORKSPACE	Workspace name.
WAIT	Waiting time for the workspace to be free: in seconds. This parameter has meaning only if the imported workspace already exists. At this time, the NIRVA PRINTNET service must wait for the workspace to be free. This parameter allows defining the maximum waiting time. If the workspace is still in use after the waiting time, the command fails. A value of 0 means: wait indefinitely. The default is "10".

## SET\_PARAM

## PRINTNET:WORKSPACE:SET\_PARAM

Source	Use input container	Use output container
CLIENT	NO	NO
WEB		
PROCED		
URE		
SERVICE		

### Description

This command changes the workspace parameters. The workspace must exist.

Any parameter can be changed except the workspace name. If no parameter is provided, its value is unchanged.

### Permissions

ADMIN

Name	Description
WORKSPACE	Workspace name.
DESCRIPTION	Workspace description. This is a free text that describes the workspace. Not mandatory.
DEF_ENGINE	Default engine version to use for the workspace. This parameter, if provided, must correspond to an existing engine entry in the engines list. Generally, the engine version to use is defined at workflow level but NIRVA can use the value given in this parameter when no engine is defined at workflow level.