



Nolio Application Service Automation Platform

Release Notes

Version 3.2

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General Information for Release

Nolio Automation and Service Platform (ASAP) Release Notes contains information for the following release:

Product	Nolio ASAP 3.2
Product Compatibility	JRE 1.6 updates 16 to 24
Release Date	18 April 2011
Release Type	GA
Release Propose	Platform support, new features, and bug fixes

New Features and Enhancements

This section summarizes the new features and enhancements that were added to Nolio ASAP version 3.2.

Platform Support

The following platforms are now supported for **Nolio Agent** machines. Support for the platforms was added on top of the 3.1 general release after its official release:

- zLinux s390x SUSE 10 ES
- IBM AIX@6.1
- Oracle Enterprise Linux 5 update 6 32/64bit

Database Support

The following database management systems are now supported as the Nolio ASAP database:

- MS SQL Server 2005 and SQL Server 2008

Actions

Actions Released over Nolio ASAP 3.1

The following actions were added on top of the 3.1 general release after the official release.

WebLogic

A new action pack has been introduced to enable simple administration tasks for Oracle WebLogic Server version 10 and 11.

The new action set pack includes components to support the following:

- Creating and Deleting Data Source
- Manipulating WLS Applications
- Manipulating WLS Servers
- Running WLS Script(s)

The full list of actions can be viewed in the [Appendix](#).

WebSphere

A new action pack has been introduced to enable simple administrative tasks for IBM WebSphere Application Server versions 6.1 and 7.

The new action set pack includes components to support the following:

- Installing EAR or WAR Applications
- Manipulating WAS Application Server
- Manipulating WAS Application

The full list of actions can be viewed in the [Appendix](#).

Solaris

A new action pack has been introduced to enable simple administrative tasks for Solaris Services and Packages. This support is for both Solaris 10SPARC and Solaris 10 x86 base processors.

The new action set pack includes components to support the following:

- Manipulating Services
- Manipulating Packages

The full list of actions can be viewed in the [Appendix](#).

New Actions in 3.2

Source Control

A new action pack designed to assist you with routine daily tasks required when working with source control applications is introduced in ASAP 3.2.

Subversion (SVN) Actions

The SVN action pack introduces the integration of ASAP with SVN source control tools. The SVN action pack includes the following actions:

- SVN – Check out
- SVN – Create Branch / Tag
- SVN – Export
- SVN - Update
- SVN - Commit

Database Actions

One action was added to the Database Actions for supporting Sybase Adaptive Server Enterprise (ASE) versions 15.0 and 15.5:

- Execute SQL Query on Sybase Database Server

F5 Actions

Two actions have been added to the existing F5 Action pack for enabling and disabling iRule:

- F5 – Disable iRule
- F5 – Enable iRule

File/Folder Actions

One action was added to the existing File/Folder Action pack to create a symbolic link file:

- Create a Symbolic Link

IIS7 Actions

Five actions were added to the existing IIS7 Action pack for performing various verifications:

- IIS7 – Check Application Pool State
- IIS7 – Check if a virtual directory exists
- IIS7 – Check if a website exists
- IIS7 – Check if an application exists
- IIS7 – Check if an application pools exists

SNMP Actions

New action pack has been introduced to enable integration with Simple Network Management Protocol (SNMP). These actions support SNMP v1, SNMP v2 and SNMP v3.

This action pack includes the following actions:

- Send SNMPv1 Trap
- Send SNMPv2c Trap
- Send SNMPV3 Trap

Enhanced Actions

The following actions were available in previous Nolio ASAP releases and are now enhanced and released in ASAP 3.2:

File/Folder Actions

The case sensitive limitation for Windows was removed in the following actions:

- Copy File or Folder
- Delete File or Folder
- Move File or Folder

Process Actions

The timeout definition is now enforced in the following actions:

- Kill Process
- Kill Process by PID

XML Actions

In the following XML action, the output Boolean parameter **XML Elements Were Found** was deleted and the output parameter **XML Elements Count** was added. **XML Elements Count** will receive an integer containing the number of XML elements found.

- Execute an XPath Query

File/Folder Actions

Advanced parameters were added to the following actions:

- Create ZIP file – Added Directory Exclude Filter parameter.
- Get File from Remote Agent – Added option to fail if the destination object exists.
- Put File in Remote Agent – Added option to fail if the destination object exists.

IIS7 Actions

The following action was updated for new output value parameters for timed out flag and exit code:

- IIS7 – Run Appcmd

Installation Actions

RPM-related installation actions had the limitation for Linux only removed. RPM actions are now supported on all platforms that support RPM packages. A new advanced parameter for naming the RPM executable path was also added to each of the following RPM-related actions:

- Check if RPM Package is Installed
- Install RPM package
- Retrieve installed RPM package name by RPM file
- Uninstall RPM package

Operation System Actions

The following actions were updated with a new advanced Boolean parameter, Fail If Not Found, which indicates whether the action should fail if the service is not found:

- Start Windows Service
- Stop Windows Service

Execution

Multi-Server Type Agent

Nolio enables the user to assign a specific or multiple Server Agents to a specific Server Type. The Server Types are abstract design elements within the architecture.

In prior ASAP versions, the user was only able to map an agent to one server type.

In version 3.2, agent mapping is enhanced and it is now also possible to assign an agent to more than one server type in either a test run or a production run. Being able to assign an agent to more than one server type allows a specific agent to perform different types of tasks.

Details information describing how this design is performed is available in “Assigning Agents to Multiple Server Types” in the *Nolio ASAP 3.2 User’s Guide*.

CLI Changes and Improvements

In version 3.2, the CLI includes the following changes and improvements:

- The Command line command file name changed from ExecutionRelay.cmd/sh to ASAP.cmd/sh.
- The CLI `-f` command can now include the category name in the path in order to distinguish between processes of the same name.
- User Input Parameter values can now contain embedded commas and hyphens if preceded by a backslash (`\`) character.
- A process assigned to two or more server types now behaves as in the User Interface.
- If executing processes with only some of multiple user input parameter values set, the process will pause to wait for input of the remaining values during runtime.

- Error messages are now more descriptive.

Detailed information describing how the new CLI functionality performs is available in the *Nolio ASAP 3.2 Command Line Interface Guide*.

File Distribution Progress

Version 3.2 includes an enhancement to display the progress of file distribution. File distribution occurs at the beginning of each process as the central server copies the necessary files to the servers. The actual number of bytes and the percentage of the total bytes copied will display in the Detailed View tab during process execution.

Defining Server Types for Running Multiple Processes

In version 3.2, it is possible to define a server type as a server specifically chosen to execute processes in parallel. Server types designated as running processes in parallel are called 'Utility' servers. For further information on how to configure a Utility server, refer to "Defining Server Types for Running Multiple Processes in Parallel" in the *Nolio ASAP 3.2 User Guide*.

Removal of Constraint on Server Types

In ASAP 3.2 it is no longer necessary to define the number of servers for a server type. As many servers as are needed can be assigned to a server type. In addition, there is a new Edit option for server types which includes the Rename and Assign Components functions.

Parameter Revert Option

In version 3.2, while in the Processes tab, it is possible to revert the value of a parameter in the Parameters browser that was overridden during the design process. There are two scenarios for the result of using the new revert option on a parameter, depending on the source of the original parameter assignment:

- If the process parameter was assigned at the Component level and overridden at the Process level, the revert option will replace the current value with the value assigned at the Component level.
- If the process parameter was assigned at the Process level and overridden at the Process level, the revert option will replace the current value with 'No Value'.

For details on how to use the option, refer to "Reverting an Overridden Process Parameter" in the *Nolio ASAP 3.2 User Guide*.

Conflict Manager Enhancements

ASAP 3.2 includes an enhancement for debugging process problems found by the Conflict Manager. When a process is being designed or published, the Conflict Manager checks the process for validity and conflicts, such as, missing mandatory inputs and multiple source updates on a parameter. The new functionality allows the user to navigate to the problematic step by double-clicking the conflict alert. For details on using this enhancement, refer to "Debugging Using the Conflicts Browser" in the *Nolio ASAP 3.2 User Guide*.

Slow Execution Initialization

In version 3.2, the length of time it takes to initialize a process running on an agent has been improved.

Upgrade Progress Visibility

In version 3.2 it is possible to view the progress of updates on agents. After the upgrade starts, the Agents Status window opens. The progress is displayed by a green bar which moves across the column row as the upgrade proceeds through the job steps.

If an upgrade step fails, an error message for the step will display in the status column and the cell will have a red background. If the upgrade includes multiple agents and fails, an additional popup will display with the message 'At least 1 agent failed to upgrade'.

At any time during the upgrade process, you may double-click on an agent row and a new popup will display a message with additional information.

Agent Execution Log

In ASAP 3.2 a new log has been added to the Server Agent and will include logging of the execution steps. The log includes content which is only relevant to the execution.

Security

In version 3.2, enhancements have been made to the storage and display of action user input parameter values of type password.

- Password parameter values are encrypted during storage and transmission.
- When displaying password values during add and edit, password characters are replaced by asterisks (*).
- The number of asterisks displayed when viewing is different than the number of password characters stored.

Design

The following enhancement to the ASAP functionality is included in version 3.2:

- ASAP version 3.2 introduces application level access control. Applications, and their components, are no longer visible to users other than the application creators and superusers. However, it is possible to assign permissions to view selected applications and run selected processes at the environment level within the application. See [Application Permissions](#) in the Administration topic below.

Administration

The following improvements are included in version 3.2:

Application Permissions

A new level of permissions has been added to ASAP 3.2, Application Permissions, to allow administrators to control user access to:

- View selected applications and their environments and processes.
- Manage environments within an application by assigning physical servers and managing instances. By assigning Environment administrator, the user also has permission to run all processes within the selected environments.
- Run all or specific processes within an application environment.

All Application Permission settings are subject to the constraints of the role and access levels set in Users Management. A user may be assigned Application Permission to run a process, but if the user does not have the Run Processes access level, the user will not be able to run the process.

Administrators can set Application Permissions for single, multiple and groups of users at one time.

By default, users with user role cannot view applications other than the applications they have created and users with superuser role can view all applications.

For additional details on managing Application Permissions, see “Managing ASAP Users and Permissions” in the *Nolio ASAP 3.2 Installation and Administration Guide*.

User Authentication

ASAP provides a users management system that supports login and authentication for its users. When a user is added to ASAP, their details are added to the users table. These details are used later on to authenticate users upon login. The ‘username’ attribute is a unique identifier of the user that is used to lookup that user in the database.

The enhanced user authentication now supports two authentication methods:

- **Basic** - The Basic authentication method is a proprietary user management mechanism that stores the user’s password in the database and authenticates the user against it upon login.
- **LDAP** - Nolio supports authentication of ASAP users against any LDAP server.

When using LDAP authentication, the user password is not stored in ASAP. Whenever an LDAP user logs in, the password that they provided during login is authenticated against an LDAP server. The required LDAP attributes are stored in the user’s record in the database.

ASAP supports authentication against any LDAP server, including Active Directory.

Adding Users Using a Batch File

In ASAP 3.2 it is possible for multiple user accounts to be created in ASAP in a single operation using a tab-delimited batch file.

The Nolio superuser will need to prepare a tab-delimited batch file that will include all required information for the new users.

For a detailed explanation on the structure and loading of the batch file, see “Adding Users Using a Batch File” in the *Nolio ASAP 3.2 Installation and Administration Guide*.

Integration with LDAP Server

In ASAP 3.2, it is possible to connect, search and import users from any LDAP server.

For a detailed explanation on how to connect to an LDAP server and to import users, see “Importing Users from LDAP” in the *Nolio ASAP 3.2 Installation and Administration Guide*.

Adding and Editing Users

In version 3.2, the Add User Details window in Administration Users Management for managing user details is now named User Account Settings. User Account Settings has a new Authentication combo box to support defining user authentication methods: Basic and LDAP.

- If LDAP authentication is selected, the Password and Confirm Password fields are hidden and five LDAP fields are displayed: Server, Port, Security Context, Search Context, and Use SSL.
- If Basic authentication is selected, the LDAP fields are hidden and the two Basic fields are displayed: Password and Confirm Password.

For a detailed explanation on adding and editing users, refer to “Managing ASAP Users and Permissions” in the *Nolio ASAP 3.2 Installation and Administration Guide*.

Resolved Issues

Version 3.2 includes fixes to some of the major components of ASAP.

The following interim lists describe the specific fixes for components, such as administration and execution and design:

Administration

Reference	Description	Nolio Versions
2899	Cannot use non-default port for mail server's in "Send Mail" action and in notifications	All ASAP versions
3766	Parameters are duplicated in the parameter's tree after import	All ASAP versions
4013	Missing data in reports due to no transactional functionality of the purging mechanism	All ASAP versions
4028	Import fails in case where a certain action's output value was used and deleted	All ASAP versions
4066	Changing notification type from "publish process" to "execution status" causes publishing error	All ASAP versions

Execution

Reference	Description	Nolio Versions
2593	CLI – cannot run process with unmapped server types	All ASAP versions
2723	CLI – NullPointerException exception thrown in case where username/password arguments are at the beginning of a command line argument	All ASAP versions
2926	CLI - execution is stopped in case where "stop for manual operation" action is included in the process	All ASAP versions
3146	CLI – cannot use parameters that are stored under categories	All ASAP versions
3645	Overriding user input parameter in the Environment level is not stored	ASAP 3.0 and ASAP 3.1
3792	CLI – cannot use comma as parameter value	All ASAP versions
3971	User with "user role and design privileges" cannot change agents selection in Test Process server selection screen	All ASAP versions
4006	CLI - execution does not supply proper indication in case where server dependencies had been changed	All ASAP versions
4082	Execution of a process from the Process tab after selecting an environment from the Environment drop-down list does not start	All ASAP versions
4158	Parameter value is not passed properly between different Server types	All ASAP versions

Installation

Reference	Description	Nolio Versions
3862	Nolio Agent startup script in the rc.d runlevel does not update the PIDDIR properly	All ASAP versions
3863	Nolio Agent startup script in the rc.d runlevel uses invalid su option on Solaris	All ASAP versions
3938	Agent Category includes \$(servername)	ASAP 3.0 and ASAP 3.1
4035	Unable to define specific service owner for Nolio Agent during installation	All ASAP versions

Design

Reference	Description	Nolio Versions
3048	User input value is not identified properly for an application parameter that is a member in an array	All ASAP versions
3079	Edit Server Type name is reverted when adding processes	All ASAP versions
3081	Minimize or collapse blocks in layout is not saved	All ASAP versions
3687	Copy action creates new parameter folder although it already exists	All ASAP versions
3917	Override of application parameter during runtime is not enforced properly	ASAP 3.1
3970	Failure to publish process that uses application parameter after overriding its value	ASAP 3.1
3985	Updates made to a flow condition are not populated to the process that uses this flow	All ASAP versions
4010	Wrong flow is opened when creating another flow with the same name	All ASAP versions

Actions

Reference	Description	Nolio Versions
2721	Check Service Status is case sensitive	All ASAP version
3140	Create Zip File has no ability to exclude folders	All ASAP versions
3973	Run Command Line (SSH) has no size limitation on return value	All ASAP versions
4030	Kill Process does not report proper result	All ASAP versions
4070, 4078	Missing descriptive information in cases where failure occurs	All ASAP versions
4168	Run Command Line (SSH) cannot run commands which require pseudo-tty	All ASAP versions
4186	IIS - Fail to update the home directory (network path or local path) using "IIS - Modify Web Site - 'Home Directory' Tab" action	All ASAP versions

Upgrading to Nolio ASAP 3.2

The upgrade process to Nolio ASAP 3.2 is supported from Nolio ASAP 3.1 and Nolio ASAP 3.0 only. If your installed Nolio base is at 3.0 or earlier, contact support@noliosoft.com for assistance in upgrading.

Upgrading from Nolio ASAP 3.0 or 3.1

Detailed instructions are listed in the `Nolio_System_Updates.htm` guide available under the **Upgrade** folder in the Nolio Automation Center 3.2 installation kit.

To upgrade from Nolio ASAP 3.0 or 3.1, perform the following steps:

1. Upgrade Nolio Data Management
2. Upgrade Nolio Execution Servers
3. Upgrade Nolio Agents from the Administration\Agent Management tab in the Nolio User Interface

After the upgrade process is completed, perform the **Reload actions libraries** task which is available in Actions Inventory\Manage Locations under the Administration tab of the User Interface.

Notes:

- All system components (Center, Execution Servers and Agents) *must* be updated to the same version level. Working with components of mixed versions is not supported and may cause unexpected results.
- Upon completion of the upgrade process, users that exported Nolio Applications using the Nolio Export function for backup purposes will need to create a new backup file.

Detailed instructions are provided in the `Nolio_System_Updates.htm` file that is part of the release documentation.

Appendix – List of Previously Released Actions

Solaris

The following actions were added to support Oracle Solaris version 10 on SPARC and x86 platforms:

- Solaris – Disable Service Instance
- Solaris – Enable Service Instance
- Solaris – Get Service Information
- Solaris – Get Service Problems
- Solaris – Install Service From Manifest
- Solaris – List All Service Instances
- Solaris – List All Service Processes
- Solaris – List Service’s Dependencies
- Solaris – List Service’s Dependents
- Solaris - Refresh Service Instance
- Solaris – Restart Service Instance
- Solaris – Uninstall Service

WebLogic

The following actions were added to support Oracle WebLogic Server versions 10 and 11:

- WLS – Create Data Source
- WLS – Delete Application
- WLS – Delete Data Source
- WLS – Deploy Installed Application
- WLS – Get Application State
- WLS – Install New Application
- WLS – Launch Script
- WLS – Resume Server
- WLS - Shutdown Server
- WLS – Start Application
- WLS – Stop Application
- WLS – Suspend Server
- WLS – Undeploy Application

WebSphere

The following actions were added to support IBM WebSphere Application Server versions 6 and 7:

- WAS – Configure Environment Variable
- WAS – Configure Web Container Ports
- WAS – Install EAR Application
- WAS – Install WAR Application
- WAS – Start Application
- WAS – Start WebSphere Application Server
- WAS – Uninstall Application
- WAS – Update Application