Agentry Apps System Landscape and Publish Mechanism to SMP 3.0

Provided by SAP Mobile - Rapid Innovation Group

Applicable Releases:

Agentry apps with SAP Backend on SMP 3.0 on SP04+.
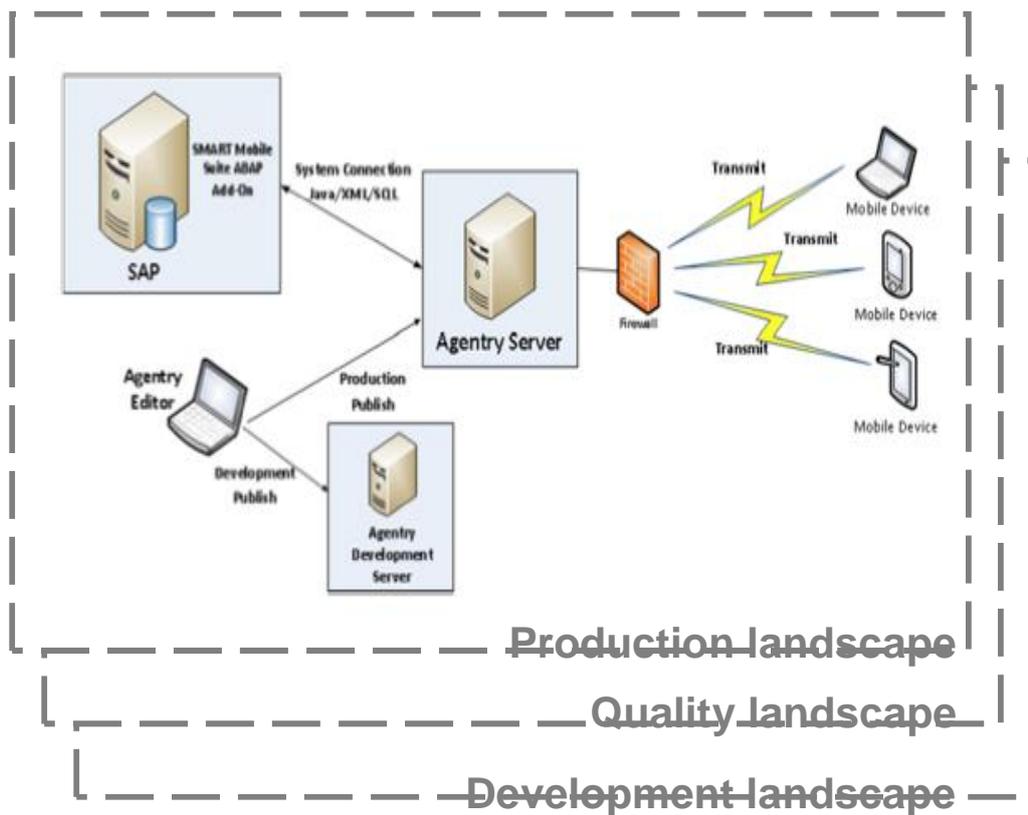
Version 2.0

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SECTION 1: PURPOSE OF THIS DOCUMENT

Purpose of this document to give overview of publish process and explain difference between development and production publish.

SECTION 2: SMP 3.0 SERVER LANDSCAPE OVERVIEW

When we use Agentry apps for SAP backend system. Typically we set-up three tier landscape development, quantity and production server for Agentry development and usage.

SAP system landscape dictates SMP 3.0 Server landscape set-up as shown in figure 3.

Figure 1: SMP 3.0 System landscape

Note: In the above figure Agentry Server represents SMP 3.0 Server.

Figure 2: SMP 3.0 Architecture

SECTION 3: PUBLISHING AGENTRY APPLICATION OVERVIEW

The Agentry Editor provides several features for creating, managing, and publishing the Agentry application project.

Publishing is the task performed when modifications within the application project are in a stable state and can then be either tested or deployed to end users. The process of publishing can include development publishes, production publishes to a single SMP 3.0 server instance, or production publishes to a cluster of SMP 3.0 servers.

Perform a development publish in Agentry Editor when performing development work, customizations, or configuration to an application project.

When you are ready to perform final quality assurance testing or need to deploy the application to users, you perform a production publish in the Agentry Editor, which zips the application files in preparation for importing in to SAP Mobile Platform Server.

Other options exist for the publish process, including the creation of files used for localization of the application. When performing a production publish, the publish version of the application must be set. Also during a production publish the option exists to delay the deployment from the SMP 3.0 Server to Agentry Clients until a specified date and time.

The location of the application definitions will be in the SMP 3.0 Server's configuration directory, in either the subdirectory Application\Development for a development publish, or Application\Production\Version for a production publish.

Refer on-line help for Agentry development set-up:

http://help.sap.com/saphelp_smp307sdk/helpdata/en/7c/1c8bd1700610148278be00e002816b/content.htm?frameset=/en/7c/1c8bd1700610148278be00e002816b/frameset.htm&current_toc=/en/7c/01cda6700610149b10c2f2a86d335b/plain.htm&node_id=4310&show_children=true#jump4310

Prerequisites

- Access to a development version of SAP Mobile Platform Server.

- Create an Agentry application in the management cockpit. Be sure to set the developmentServer configuration property in Agentry.ini to true. Agentry.ini is located in<*SMP_HOME*>\Server\configuration\sap.mobile.platform.server.agentry.application.

- An agentry application project that is ready for testing.

- An application project that is ready for production use, or user acceptance and quality assurance testing.

- Obtain the location to publish the project from the system administrator, and verify that you have read-write access to it.
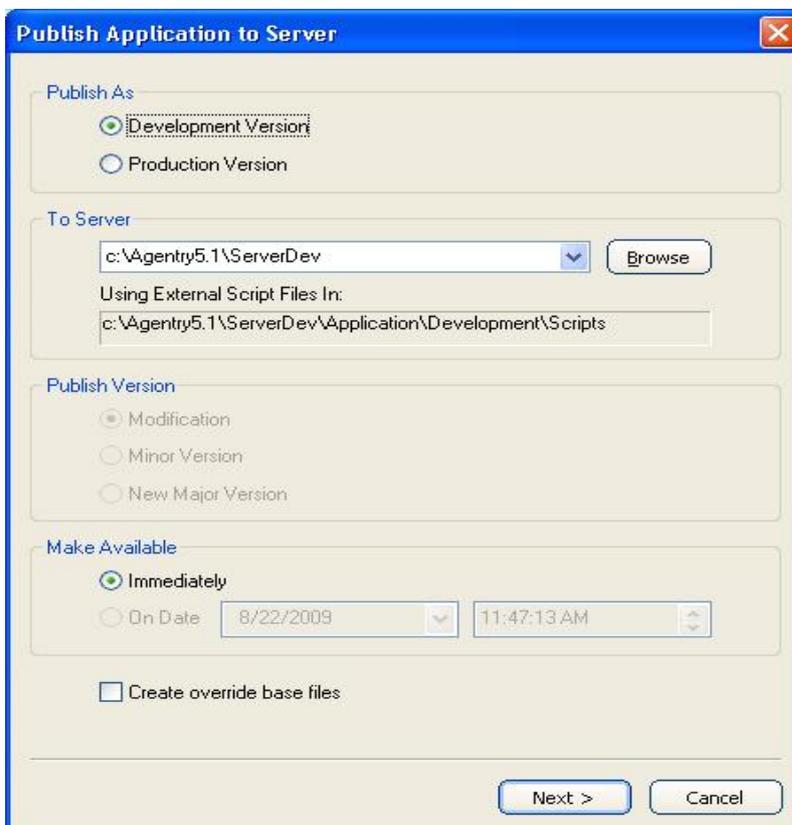
SECTION 4: DEVELOPMENT PUBLISH

During the development phase, you publish to a development server for testing purposes.

A development publish will transfer the definition files in the application project from the Agentry Editor to the SMP 3.0 development Server. The files are stored on the file system at the installation location of the SAP Mobile Server; specifically within the configuration directory of the SMP 3.0 Server in the sub-directory Application\Development. A development server has no concept of application versions. The first time you publish, all files are written to a location on the development server. Subsequent development publishes overwrite only the files that have changed.

Note: - D**evelopment publish should only be performed to an SMP 3.0 development Server.**

Begin the publish by clicking the toolbar Publish button in Eclipse.

The publish process checks the overall integrity of the application project. Agentry Editor list errors or warnings in the Problems View. Prepare for the possibility of needing to correct these issues to perform a successful publish. You can publish an application with warnings, but not with errors. Warnings should be corrected prior to deploying to end users.

For further details:

http://help.sap.com/saphelp_smp307sdk/helpdata/en/7c/1a2bcd70061014be6ef7567f938646/content.htm

SECTION 5: PRODUCTION PUBLISH

When development and testing are complete, you can perform a production publish, which creates a zip file of all specified application files, which you can then import into SAP Mobile Platform Server. A production publish enables you to indicate a version number, which must increment during subsequent production publishes. You can also include additional project files, such as Java resource files, application-specific DLL files, JAR files for the back end, and other back-end configuration files.

An Agentry project's production publish version contains the three components major, minor, and modification number. In the publish version of app for example SAPWM-v1-0-2-app, the 1 is the major version, 0 is the minor version, and mod 2 is the modification number. The publish wizard will contain a section where the developer will specify which of these should be changed. This selection impacts the behavior of the application during the next synchronization by the Agentry Clients.

Guidelines for choosing the version

- **New Major Version**: the only choice when performing the first production publish for an application. When you select a new major version, the server processes each transaction sent by a client using the old version of the application to avoid incompatibilities with new versions of the same transactions. Once the server process all pending transactions, it provides the updated application to the Agentry Clients.
- **Minor Version**: indicates minor updates or bug fixes that do not affect transaction processing.
- **Modification**: a modification to a major or minor version that does not affect transaction processing

Because of the above application behavior, it is the responsibility of the developer performing the publish to determine which behavior is desired, and to then select the proper change to the publish version of the application.

During production publish you need to specify temporary folder to store production publish files. You can later create deployment zip file from this temporary location once all the required auxiliary project files are available.

The production publish process produces a zip file which only contains your Agentry definitions. You do have option to include associated auxiliary project files to include in the zip file, such Java resource files, application-specific DLL files, JAR files for the back end, and other back-end configuration files.to produced deployable production zip file.

If you don't want to include associated auxiliary project files during the publish process then you can copy all related project files to production publish application folder to create deployable production zip file.

Begin the publish by clicking the toolbar Publish button in Eclipse.

Note: - **A production publishes is performed to an instance of the SMP 3.0 Production Server**

Note: Right-click in the field under Publish Folder Structure to include auxiliary project files with the application project.

Further help on production publish:

http://help.sap.com/saphelp_smp307sdk/helpdata/en/7c/1a300370061014b70aff251250df86/content.htm

Screen shot of sample production application folder along with auxiliary project files.

Figure 3: Agentry apps. Deployment folder structure

SECTION 6: SMP 3.0 DEVELOPMENT VS. PRODUCTION SERVER FOR AGENTRY APPS

An SMP 3.0 server is identified as type "Development" or "Production" during installation. Important distinctions of an SMP 3.0 development Server is only a single, latest version of an application is kept on the server. Agentry application definitions stored in multiple files not intended for large, concurrent users (because of logging and other parameters tuned for development purposes). Important distinctions of an SMP 3.0 production Server, Application versions are stored on the server.

Application versions consist of three part naming components.

Major
Minor
Modification
For example - SAPWM-v1-0-2-app

Perform a development publish in Agentry editor to SMP 3.0 development server when performing development work, customizations, or configuration to an application project.

When you are ready to perform final quality assurance testing or need to deploy the application to users, you perform a production publish in the Agentry Editor to SMP 3.0 production Server, which zips the application files in preparation for importing in to SAP Mobile Platform Server.

>   **Note**: - Generally it is not recommended to store more than 3 versions of application versions on SMP 3.0 production server. Application versions which are not needed can be deleted from management cockpit.

To delete any published application version simply select required version and click on delete button.

PUBLISH

Publish Agentry App [_____] [Browse...]

PUBLISHED VERSIONS

SAPWM 1.0	Delete

SECTION 7: AGENTRY FILE TYPES

Agentry File Types
Agentry Project File - .apj
Agentry Development File - .agd
Agentry Development File Compressed - .agdz
Agentry Production File - .agp
Agentry Production File Compressed - .agpz
Agentry Export File - .agx
Agentry Export File Compressed - .agxz

SECTION 8: AGENTRY DEVELOPMENT LANDSCAPE

Figure 5: Agentry development landscape and various components
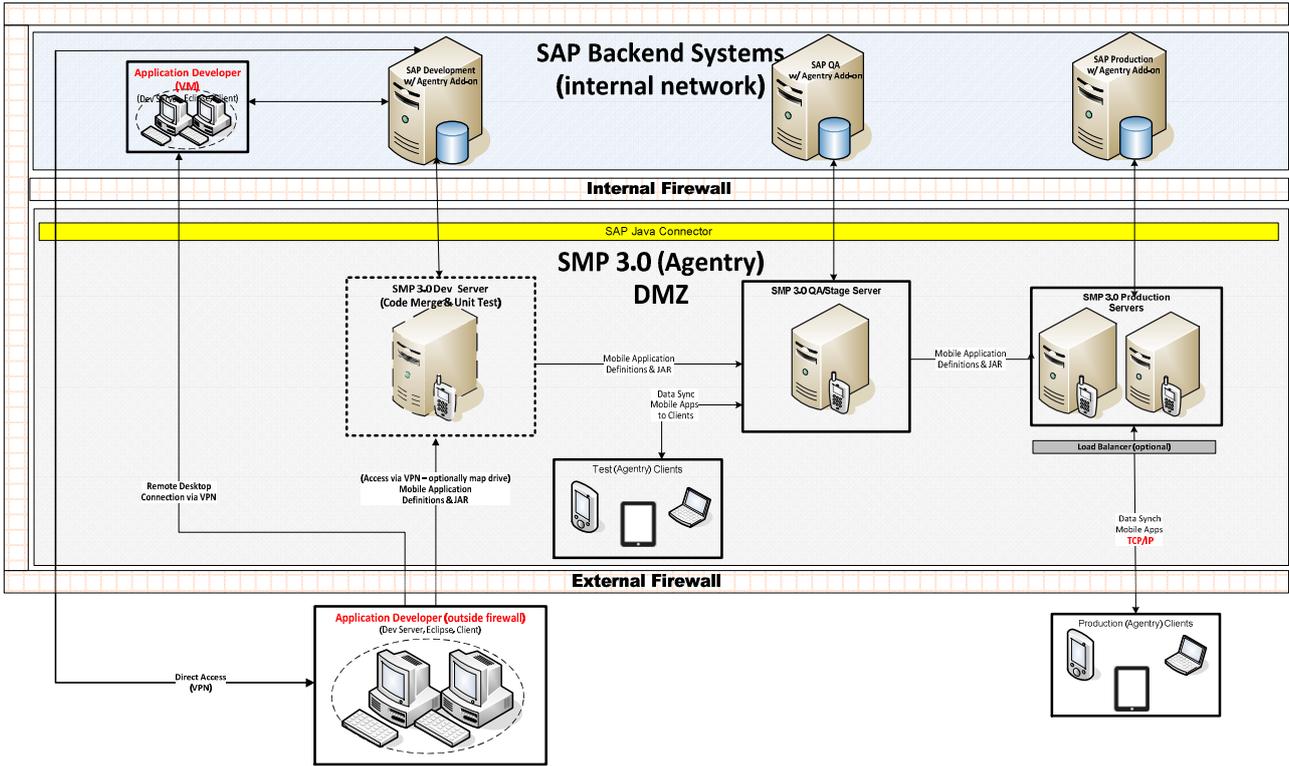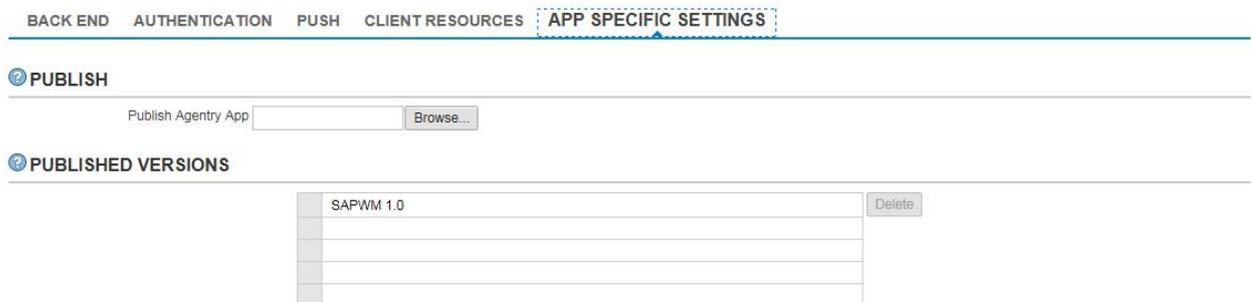
Figure 6: SMP 3.0 Server Technical landscape (Logical)

SECTION 9: APPLICATION DEPLOYMENT PROCESS

The movement of the mobile application through the customer landscape requires the coordination of following activities:

1. The movement of the ECC transports for the project, including both workbench requests and customizing requests.

2. Deployment of Agentry apps from management cockpit by specifying application zip folder generated in figure 3. (Refer: **Section 11 for step-by-step guide**)

3. Any custom or application specific that is required.

SECTION 10: GENERAL CONSIDERATIONS

1 Develop and unit test by publishing to a development server
2 Publish production mode application to staging server or unit test development server and perform end-to-end testing. When a version of the application is ready to be released, the development team will create a deployment zip folder   with any JAR file for the custom java code, JAVABE.ini file populated with right SAP system connection and other auxiliary files packaged into deployment folder.
3 Create Service users and required authorization for mobile users in respective SAP systems.
4 SAP Mobile Platform Server installation including adding Cluster Nodes (optional) and Single-host node along with custom database for production install.
5 Installation and configuration of any Reverse Proxy or load balancer (optional)
6 Deploy Agentry application zip folder on the target SMP 3.0 Server.
7 Once Agentry application is deployed modify any URL paths. Time zone settings, Agentry.ini file entries from management cockpit or changes can be done before creating deployment folder.
8 Export certificate from SMP 3.0 server for Agentry clients to connect.

Note: - Agentry.ini file can't be found under application folder once application is deployed on production server.

SECTION 11: FUTHER REFERENCES

1) For step-by step guide to install WM 6.X apps on SMP 3.0

http://scn.sap.com/community/mobile/blog/2014/08/30/quick-start-guide-sap-work-manager-6x-with-smp-agentry

2) Refer any product specific installation and configuration guide.

www.sap.com