December 23, 2022

BETA CAE Systems announces the release of SPDRM v1.9.0

About this Release

BETA CAE Systems announces the release of SPDRM v1.9.0.

SPDRM v1.9.0 is now available, with numerous important enhancements in both the back-end and in the SPDRM client.

Contents

Release highlights

This version introduces important enhancements related to the performance and scalability of the system, as well as new functionality that empowers the end-users to do more with SPDRM client-side and the system administrators to have better overview and control of the system.

For all SPDRM environments that handle Subsystems saved through ANSA, the introduction of a new method for the storage of attributes and ACLs of instance parts (i.e. part references within Subsystem hierarchies) leads to the drastic reduction of the footprint of these metadata in the database for all new records. In addition, a web-service is offered to facilitate the migration of existing databases to the new implementation, leading to significant reduction of the database size.

Again, related to Subsystems saved through ANSA, major improvements took place in the performance and the responsiveness of the server during save. These improvements mainly affect the saving of Subsystems with big hierarchies (number of contained parts in the order of tens of thousands) and the handling of concurrent Subsystem saves.

Related to the scalability of the SPDRM server, this version offers enhanced handling of concurrent requests for data saving, overwriting and deletion, leading to improved availability and responsiveness of the server under heavy traffic conditions.

Significant enhancements were made in the data search engine, introducing new possibilities for data search through KOMVOS, ANSA, META, or any third-party application via REST API:

- For date-based searches, the new date query functions "startOfDay", "startOfWeek", "startOfMonth", "startOfYear" are introduced. Furthermore, searches relative to current date are supported based on the keywords "h", "m" and "s", for hours, minutes and seconds respectively.
- Relationship based queries such as, search for Simulation Runs based on the value of their Reports, are now supported.
- Containment tests using the "in" operator and a list of values are now possible.
- For third party REST clients, search is also simplified: From now on, it is only the query typed by the user that is sent to SPDRM, as opposed to the wrapped BetaQL that was formatted as JSON in the past.

For system administrators, aiming to the improvement of the overall setup of a multi-site installation, this version introduces an authoring tool for the configuration of remote sites. This tool is accessible through the SPDRM Server Web Console (under *RIOC Services > Server Configuration*).

In addition, the following diagnostics are now available through the SPDRM Server Web Console (RIOC Services > Status) for each registered remote site:

- Communication validity between SPDRM server and RIOC server
- Successful file transfer between the main and the remote site
- Successful execution of RIOC commands to remote site
- SSL certificates validity

Furthermore, a network performance benchmark tool is also available through the SPDRM Server Web Console (*RIOC Services >Performance*) to collect network statistics that affect the performance of a multi-site system (RTT, packet loss, deviation).

For end-users executing SPDRM processes on remote resources (i.e. BETA Apps Launcher) through ANSA, a set of improvements enables better overview of the process status through more elaborate responses of the web-services called by ANSA, as well as error handling and error tracing in case of failed process execution. In addition, a verification page for the available BETA Apps Launchers is now offered in the SPDRM Server Web Console.

Finally, this version includes several back-end developments to support KOMVOS version 23.1.0 and later in the following areas:

- Alerts Management
  - Create alert
  - Get alert notification
- Process Design
  - Create and edit Observer Nodes
  - Create and configuration of MxN nodes
- Issue Management
  - Create and edit Issue
  - Status transition actions and workflow execution
- Submitted Jobs Management
  - Overview of submitted jobs for selected Simulation Model
  - Navigate from Simulation Runs to Submitted Jobs and vice versa

For more details about the new software features, enhancements and corrections please, refer to the Release Notes document.

Documentation Updates

New Documents

Updated Installation Guide, Administrator's Guide, Data Management Reference Manual, Scripting API Guide and REST API documentation.

Supported Platforms and System Requirements

The server software of SPDRM is running under 64bit flavors of Linux.
The client software of SPDRM is running under 64bit flavours of Linux and MS Windows.

The software requires a different license key to the rest of the products of BETA CAE Systems. This license key should be incorporated into the same license file, if such is already installed, and requires beta_lm, the proprietary license manager of BETA CAE Systems.

For details, refer to the System Requirements document.

Download

Where to download from

Customers who are served directly by BETA CAE Systems, or its subsidiaries, may download the new software and documentation from their account on our server. They can access their account through the "sign in" link at our web site.
Contact us if you miss your account details. The Downloads menu items give you access to the public downloads.
Customers who are served by a local business agent should contact the local support channel for software distribution details.

What to download

All files required for the installation of this version reside in the folder named: "**SPDRM_v1.9.0**" and are dated as of **December 23, 2022**.

These files should replace any pre-releases or other files downloaded prior to that date.

The distribution of this version of SPDRM is packaged in one, single, unified installation file that invokes the respective installer and guides the procedure for the installation of the required components (i.e. SPDRM server and client).

For the installation of the software download the .tar.gz file that contains the server and client software for all supported platforms.

Earlier software releases are also available in the sub-directory called "Previous_Versions" or in a folder named after the product and version number.