

# A Milestone Release: Replication, Realtime Streaming Datamodels and the Smart Datamodeler.

This release has been very exciting for us as we are working relentlessly to add new features into our platform that focus on the ease of development, user experience, fault tolerance, scalability and much more. We are proud to introduce advanced replication mechanisms for the AMI Center, Realtime Streaming Datamodels and the Smart Datamodeler Tool.

As clients leverage our platform to run critical day to day operations, data replication becomes an indispensable part of the process. While replication could be accomplished previously, this release truly streamlines it so that you are now able to fully replicate center(s) in realtime with a single command.

Datamodels are now able to subscribe to live feeds and process streaming updates in realtime. Visualizations can also sit on top of these realtime datamodels. You guessed it! You can now make realtime charts.

Also, the growing number of panels, windows, tabs, datamodels, datasources, realtime feeds, etc in use cases led us to a complete redesign of the datamodeler. With the Smart Datamodeler, you can now quickly switch between different perspectives to get a clear and focused view based on what you're working on.

Please refer to the following information for more details.

## AMI Web:

- Realtime datamodels(subscription)
- Added a "keepdata" option to datamodels so that reprocessing of a datamodel does not reset its cache.
- Added tableset to callbacks
- Added TreePanelGrouping and TreePanelColumn are now part of dom
- The Geographic mapbox's layers are now part of dom
- New Smart Data Modeler Tree and a new look and feel for the smart data modeler
- Columns, Tabs and Menu Items have customizable ids
- Integrate with web testing tools(divs have ids now)
- Ami Stack trace is now clickable
- Better html editor, support snapping.
- Improved included layouts adding child cloud layouts
- Add masked cell formatting in tables. Cell contents can now be masked with dots just like passwords.

## AMI Center/AMIDB:

- Added BYNAME keyword to UNION clause so that tables can be unioned by common column names, instead of column positioning.
- Added CENTER and REPLICATION tables to support replication configuration
- for GROUP BY, honor ORDER BY even for non displayed columns
- support CREATE METHOD and DROP METHOD to define custom amiscript methods within the amidb
- added ami.db.preschema.config.files to center allowing for script to be executed before tables/triggers/procedures are created.
- Added Aggregate methods: catUniqueLimit, catUniqueLimitAsc, catUniqueLimitDes amiscript methods
- Smarter Query Planner, uses index with inner selects
- Smarter Query Planner use existing index when it exists on the larger table

## AMIScript:

- Added version() and versionDetails() to get versions of AMI
- Added strEncode(...), strDecode(...), urlEncode(...), urlDecode(...), urlPath(...),
- Added signDataMac(...), verifyDataMac(...) methods
- Added Callback::setAmiscript and Callback::resetAmiscript
- Added Panel::exportUserPreference() amiscript method
- Added Layout::exportUserPreferences() and Layout::exportUserPreferencesById() amiscript methods
- Added TablePanel::meetsWhereClause(...)
- Added TablePanel::isValidWhereClause(...)
- Added PdfBuilder::addHeaderImage(...) and addFooterImage(...) with height argument
- Added callbacks for mouse events: Panel::onMouse(...) and Desktop::onMouse()
- Added callbacks to trees: onColumnsSized/Arranged,onSelected,onFilterChanging

## Adapters:

- Add Redis Ds Adapter
- Better error handling for SCM
- Add to AMI Okta Plugin attributes, username field, isAdmin, isDev
- Add to SAML plugin support for DEFAULT\_LAYOUT and LAYOUTS, adding properties saml.ami.group.field, saml.ami.groups, saml.group.[grpname].ami.layouts, saml.group.[grpname].ami.default.layout
- Improved Git Scm Adapter
- Add support for Okta single sign on with Oauth

## Misc:

- Added Content-Security-Policy to header for better security. Configurable via ami.content.security.policy property
- Performance improvements in json engine
- Performance improvements to Wire protocol between Center/Relay/Web
- Improve OMAS, better basic configuration
- OMAS now publishes each Order and Trade Message
- OMAS handles invalid fields, allowing for them to be populated

**If you have any questions about these new features or would like a demo, please email [info@3forge.com](mailto:info@3forge.com).**