

3forge's Biggest Update of The Year: Introducing Bloomberg Datasource Adapter, DBOs, iCalendar, and Pivot Tables

3forge is excited to introduce several new features designed to enhance functionality and usability of the platform. Notable updates include the integration of a Bloomberg datasource adapter for seamless access to historical and reference data, introduction of Database Objects (DBOs) for storing custom data types, and the launch of iCalendar functionality for easier scheduling and event management. Additionally, 3forge now offers dedicated Pivot Table functionality to streamline data analysis and reporting, empowering users with powerful tools for summarizing and visualizing complex datasets.

Bloomberg Datasource Adapter

We are pleased to announce the addition of the Bloomberg datasource adapter, following the successful implementation of B-PIPE data streaming. This new feature provides Bloomberg customers with access to both historical and reference data directly within the 3forge environment, empowering clients with an easy, integrated solution for creating interactive visualizations without the need for external tools. The integrations are backed by robust, Bloomberg-approved authentication mechanisms ensuring only entitled users have access to the correct data.

Database Objects (DBOs)

Introducing the highly versatile DBO, the latest addition to AMIDB. This new concept allows for custom objects with user-defined methods/callbacks to be added to the AMIDB schema. Backed by Java code, the DBO functions similarly to existing tables, procedures, timers etc. Importantly, DBOs are seamlessly integrated into the managed schema and can be reused each time the database is initialized.

iCalendar Functionality

Email reporting workflow has become more sophisticated with the introduction of iCalendar functionality, making it easier to send calendar invites directly from 3forge. Designed to seamlessly integrate with our existing email functionality, this new feature allows the user to automate the generation and distribution of calendar events—ideal for coordinating across teams, time zones, mailing lists, and more.

Pivot Tables

As part of our ongoing Excel enhancements, 3forge now offers a dedicated Pivot Table functionality, designed to streamline and optimize data analysis. A robust tool powered by 3forge's high impact scripting language, Pivot Tables allow users to summarize, filter, and group diverse datasets from multiple sources based on their specific needs.

AMI Web

- Show series name on chart formula error message
- Support pivot trees
- Convert and push Bloomberg DATE, DATETIME, TIME elements as long values to AMI for BPIPE Processor
- Add support for iCalendar (ics) file format
- Add options for BPIPE processor (subscription options, keep output)
- Added alert when editing transient column in tree
- Processor: prevent table creation if there is no schema
- Show processor type on title when creating real time processor
- Add email support for csv
- Added support for tabbing to cycle the next field for multicheckbox and text field with suggestion
- Add more support for excel datetime and number formats. Add methods to expose setters for spreadsheet timezone offsets
- Added Keep Output, Dynamic DM, and Subscription informational columns to Dashboard Objects --> Datamodels
- Add cancel button column setting dialog to tables
- Add exception throwing for sendEmailSync
- Support backwards compatibility with use ds=AMI in layouts
- Add XmlBuilder
- Match tree copy functionality with tables
- Support activity tracking for amiscript execution and panel visibility on the web
- Added support for multi-select of quick filter options
- Field focus feature: onFocus() callback works for all field types. Added KeyEvent::getTargetPanel() and KeyEvent::getTargetField()
- AutoFitAllColumn respects column ratio upon invocation for tables
- Support user preferences for child layouts

AMI Center/AMIDB/AMIHDB

- Add logging on replication failure
- Added better error message on ALTER clause
- DESCRIBE now uses multiline in formatting.

- Added DBO feature, added option ami.db.dbo.plugins

AMI Relay

- Reintroduced 'Topic' to .amilog files but only records deltas. Also added 'queued' stat for topics.
- In REPLAY plugin, include duration in millis in logged response

AMI Script

- Support {...} followed by operation, ex: {5;} * 3;
- Added session::copyToClipboard()
- Add session::savePreference(), session::loadPreference() methods
- Added DividerPanel::lock() and DividerPanel::isLocked()
- Added methods XmlText::toLegibleString() and XmlElement::toLegibleString()
- Added TablePanelColumn::setWidthFixed() and TablePanelColumn::isWidthFixed(). AutoFitAllColumns and autoSizeAllColumns now will not respond to fixed columns
- Add TablePanel::getScrollPosition, TablePanel::setScrollPosition(...)
- Add XmlText::toString()
- Add XmlElement::getName(), XmlElement::getElements(), XmlElement::getFirstElement(), XmlElement::getAttribute(), XmlElement::hasAttribute(), XmlElement::toString(), XmlElement::addAttribute(), XmlElement::addNode(), XmlElement::removeAttribute(), XmlElement::getChildren(), XmlElement::deleteFirstElement()
- Added XmlBuilder AmiScript methods
- Added toHex() AmiScript function
- Added session::getBrowserIp()
- Added Error::getStackTrace() method

Adapters

- Add client listener for connection logging for Hazelcast
- Added IBM MQ Feedhandler
- Add Aeron feedhandler



- Add gRPC Datasource Adapter, Feed Handler, and Processor
- Add request id to logs for Bloomberg Adapter
- Allow kx to auto-reconnect
- Included conversion of DATETIME and TIME Bloomberg elements to long for Bloomberg Datasource adapter
- Added warning log message if request type for Bloomberg datasource adapter is invalid. Made request type field more flexible (lowercase, uppercase, etc all valid) for Bloomberg datasource adapter.
- Add tableMap handling to Kafka FH
- Support level 2 streaming for BPIPE
- Support batch requests/multiple tickers in query for Bloomberg historical and reference
- Added ticker name to schema for Bloomberg Adapter (Historical and Reference Requests)
- Add property to Kafka FH to determine consumption behavior when invalid record is received
- Added support for currency directive for bloomberg historical adapter
- Added timestamp.usenanos to KX adapter
- Support for params in JDBC
- Added datasource adapter for Bloomberg historical and reference data

Optimizations

- Optimize tables, only send onhover in javascript if tooltip defined.
- Optimized Form Fields
- Optimized parquet reader to only pull requested columns.
- Added Amiclient addMessageParamFloatEncoded and addMessageParamDoubleEncoded for faster performance of writing doubles/floats. Also added compation Amiscript functions encodeDouble64, encodefloat64, decodeDouble64, decodeFloat64
- Filter multichexbox applies deltas on options changed instead of complete rebuild

Look and Feel

- Look and feel improvement on helper text for calendar fields

- Add more padding between mouse and tooltip for tables
- Support font and background color for radio buttons
- Added Form Field Focus style for border
- Add error icon in datamodeler for undefined dm
- Better space allocation for selected items in Multichexbox

Misc

- Allow user to redirect activity tracking log via configuration
- In cron, support */n for days and months
- Add ami.amiscript.default.limit to set default query limit for center and web
- Support use ..._p1=(...expression ...) syntax for queries
- Better error handling on onTableAdded/Removed
- Provide a log line to check for JCE Unlimited Strength Policy, also in Help -> About -> Env tab
- Support multiline values in the cell of a table. Added setlocal multiline_cells=on
- Add support for reading excel inline strings
- Change filename for consistency
- Added OmitStackTraceInFastThrow option to jvm
- Divider: add the ability to bounce back if space is sufficient during window resize
- Focus field manages scroll panes. Focusing form when clicking on field focuses to form and field
- Added FormField::isFocused() and FormPanel::getFocusedField()