

BPIPE Plugin, Excel Enhancements, and Relay Transformations

In Q2 2024, 3forge demonstrated its dedication to revolutionizing data visualization through a series of innovative updates. Each of these latest enhancements provide users with powerful, intuitive features that reflect the company's ongoing commitment to advancement and excellence.

BPIPE PLUGIN

Bloomberg's BPIPE is now seamlessly integrated into AMI. Developers can add BPIPE processors, stream in real-time market data, and build visualizations all within the dashboard. This powerful tool provides access to real-time market data at your fingertips, providing real, actionable insights that keep our clients ahead of the curve.

EXCEL ENHANCEMENTS

We have continued to upgrade our Excel functionality, extending the capabilities of the recently introduced Flexsheet Excel functions. Users can now access a raw view of Excel files, providing complete flexibility when handling complex spreadsheets. Enhanced support for parsing spreadsheets with pivot tables broadens the scope of possibility for Excel integration. Furthermore, the inclusion of range-based methods allows for precise spreadsheet editing and generation. With these changes, users can streamline workflows and generate sheets with increased efficiency.

RELAY TRANSFORMATIONS

With the introduction of relay transforms, 3forge has enhanced its platform by enabling the interception and transformation of messages within the relay before they reach the center. This new feature provides greater flexibility in managing data flows by allowing users to apply custom logic, modify content, or filter messages in real-time. By leveraging relay transforms, organizations can achieve more tailored and efficient data processing, ensuring that only the most relevant and appropriately formatted information is passed along to downstream systems.

AMI Web

- Added datetime and percentage handling for Flexsheet::setValue(), added extra handling for apache-poi generated spreadsheets, added helper method to builder for getting Excel positions, updated builder error messages to be more verbose, added support for named single cell, added support for case-insensitive dimensions
- Dragging/arranging tabs maintains position of hidden tabs
- In dev mode, arrange tabs dialog now includes hidden tabs
- Added auto-expand visible columns on tables
- Scroll to method declaration when double clicking on a method usage from custom methods
- Added support for programmatically selecting heatmap node and setting node border color based on grouping path
- In Multicheckbox, space key toggles selection and enter key confirms and closes menu
- Added 'autostart' column and flag for headless session admin tool
- Saved sorting to real-time tree without user preference
- Supported searching by substring for text field values
- Added support for Bloomberg realtime market data (BPIPE)
- Tree sorting happens after data are loaded, real-time tree sort retained
- Added help text for 'clear on data stale' button
- Added AmiScript Session::setUrlParams(), for LAYOUT params colon (:) is replaced with underbar (_) for url legibility. Added ami.web.url.always.include.layout which forces LAYOUT=.... in url
- Added HTTP 403 FORBIDDEN. HTTP params use LinkedHashMap to maintain ordering
- Support UTC and UTCN methods in AMIDB, added better support for using the property ami.default.user.timezone for the AMIDB, added two procedures: __GET_TIMEZONE and __SET_TIMEZONE(String timezone)

- Clarified AmiScript Window::setType()
- Added support for ColorGradient in AMIDB Shell Console, added ColorGradientToByteArrayConverter
- Added expand/collapse menu options on tree
- Support saving tree column ordering and tree column width as part of user preferences
- Added menu option to download cloud file without opening it
- Added usages tree to find custom methods

AMI Center/AMIDB/AMIHDB

- Change AmilmdbSession to be the AmiService instead of AmilmdbScriptManager
- No longer allow aggregates in GROUP BY clause
- In Command line, reported actual type for returned object (unless null, in which case fall back to expression return type)
- Make toString() in amidb command line consistent with string casting
- Handled HAVING clause with implicit group by for HDB
- Faster index queries, especially when limit is applied
- Better error handling on HDB exception

AMI Relay

- Added support for publishing nvfix/fix msg for Amps Datasource
- Added AmiRelayServer to admin console
- Include stack trace in error under datamodel editor
- Added relay.transforms and *.relay.dictionary
- Added binary flag to flat file reader
- Added support for AmiTableMap property in Tibco Streambase

AMI Script

- Added Heatmap::isSelected() AmiScript method
- Heatmap::highlightNode() now returns false if node is top level grouping
- Added FormTextField::getPerformSubstringMatching() and FormTextField::setPerformSubstringMatching()
- Added Flexsheet::hideSheet(), Flexsheet::showSheet(), Flexsheet::deleteSheet(), and



Flexsheet::renameSheet(). Added parseXlsx overload with range selector. Added parseRawXlsx to get raw view of Excel files. Added range-based table get, named range get/set/clear for Flexsheet. Added additional support for reading spreadsheets with pivot tables

- Added parseInt() function to AmiScript
- Added better error handling for session::loadUserPreferences(...)
- Added Session::loadUserPreferences(...)
- Better error message on bad constructor for map
- Throw error on invalid operator in assignment, ex: String s!='abc'
- Change Password::peekAndClear() to return null instead of empty string
- Added the ability to expand/collapse selected tree nodes via amiscript

Optimizations

- Minor optimization for Amps Datasource
- Reduced calls to fill real-time table
- Better performance for relationships with trees
- Better performance for tree updates when there are no filters are applied
- Primitive values copied faster in simple select

Look and Feel

- Cloud and absolute layouts now ordered by 'Modified Time' in viewer
- Made output of Command line and AMIDB web shell tool identical
- Divider settings shown instead of style settings upon creating a new divider
- Increase contrast for log out button in the log out page and view session buttons

Misc

- Support non-ColumnarTable in queries
- When casting from SQL, used casters from method factory (hence, uses json for ami)
- Support returning StringBuilder (and other non-basic types that have a marshaller)
- Better error message when attempting to marshal

object that can't be marshalled

- In SHOW help, include METHOD
- Added email attachment mime support for more Microsoft file types
- CompactLongMap can now store >1 billion records. (Presumably unlimited length)

If you have any questions about these new features or would like a demo, please email info@3forge.com.