

# A true milestone release: The first web based IDE for creating and debugging complex dashboards & workflows.

Within the browser, developers now have a fully integrated IDE for not only creating dashboards and writing code but for setting breakpoints, stepping through datamodels, viewing local variables and walking through the call stack.

Using the debugger, developers can also navigate through the entire dashboard's object model to inspect object states. And combined with source control integration, create richer and more customized dashboards that users have never experienced before

## End User Experience:

- Calendar chooser has close button (in addition to just clicking outside)
- Geographic maps can now show labels directly key nodes
- Support for blinking tabs (custom color & frequency)
- Field selection boxes can have custom sorting (original order, ascending, descending)
- Tree Panels can now use a recursive/nested grouping structure
- Title in the dashboard header bar is now dynamic (using string templating)
- Login
  - » Add better feedback for login button when external SSO server is slow to respond
  - » Ability to assign a logout page, instead of redirecting back to login page (see `web.logged.out.url` property)
  - » SAML: better handling when endpoint doesn't match destination

## Performance:

- Subpanels stop rendering when completely obscured because their containing divider is at the extreme edge, reducing bandwidth and processing overhead
- Faster Diff tool when comparing large files
- Performance Improvements with realtime aggregation engine
- Decorate Processor available in Dashboards, which allows realtime blending of data within a users dashboard (instead of globally for all users)

## Styling:

- Added support for `@keyframes` in css manager, allowing for animated styling, etc.
- Quick column filter style options: Font color, Font size, Background color, Border color, Height
- Font-family option in Visualization Title section
- Conditional styling for geographic labels: Label limit, Font family, Font color, Font size, Position

## AMIScript:

- New methods for Tab:
  - » `Tab::setBlinkColorFormula(String color)`
  - » `Tab::setBlinkPeriodFormula(int period)`
  - » `Tab::getSelectColorFormula()`
  - » `Tab::setSelectColorFormula(String formula)`
  - » `Tab::getUnselectColorFormula()`
  - » `Tab::setUnselectColorFormula(String formula)`
  - » `Tab::getSelectTextColorFormula()`
  - » `Tab::setSelectTextColorFormula(String formula)`
  - » `Tab::getUnselectTextColorFormula()`
  - » `Tab::setUnselectTextColorFormula(String formula)`
- New methods for TablePanel:
  - » `TablePanel::getTitle()`
  - » `TablePanel::setVisibleColumns(...)`
  - » `TablePanelColumn::setWidth(...)`
  - » Callbacked on `ColumnsSized(...)` for
- New methods for MenuItem:
  - » `MenuItem::getSubMenuItems()`
  - » `MenuItem::getParentMenuItem()`
- Added 27 getters for PdfBuilder class
- Added new Processor class which represents a realtime processor of data:
  - » `Layout::getProcessor(...)` for getting a realtime stream processor by name
- `Processor::getId()`
- `Processor::getLayout()`
- `Processor::toTable()` which takes the current state of a realtime feed and snapshots it to a table.
- Functions:
  - » `logInfo(...)` for writing info level message to `AmiOne.log` file
  - » `logWarn(...)` for writing warn level message to `AmiOne.log` file
  - » `getRawJavaStackTrace()` for getting the underlying java stack trace
- Added Callback on `AsyncCommandResponse(...)` for handling the responses to asynchronous calls to backend systems

## Developer Mode:

- Debugger – A fully integrated debugger within the browser based development environment
  - » Set breakpoints in any AmiScript Editor Panel (by clicking in the gutter to the left).
  - » As breakpoints are hit, the current line is highlighted and execution is paused.
    - Local Variable View
    - Table Set View to see current state of datamodels
    - Full DOM to navigate through the entire dashboard hierarchy of panels
    - Stack Trace View to see where code is being called from. Navigate up the stack to view local variable state of calling methods, etc.
- Improved Object Browser Tool:
  - » Add quick column filters in Object Browser Tool
  - » Quotes are escaped when searching
  - » Show parent menu action for panels
  - » New column in relationships: Relationship behavior (i.e run on double click, right click)
- Better Layout Management:
  - » Auto save check for existing newer layout on login
  - » Ability to diff across autosaved layouts
  - » Ami layout files now save AmiScript in an easy to read/diff format
- Variable tree has better icons

## Adapters:

- Apache Avro On demand Adapter

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