New in this Version

About Version Features

This feature is new in Ignition version **7.9.X**
Click here to check out the other new features

Upgrading Ignition

See the **Installing and Upgrading** page

New in 7.9.17

Gateway Redundancy Setting

Backported the Master Node "Config Update Queue Size" Redundancy setting which is the maximum size of config updates allowed before a full transfer is performed.

Gateway Configuration File Reference

Added an option to control how much information is given to clients/designers in error messages.

Designer Find/Replace

The Designer Find and Replace now includes Tag property values as well as substrings in Tag Event Scripts.

New in 7.9.16

The Ignition 7.9.16 version contains only bug fixes and no new features.

New in 7.9.15

Scale Out Architecture

As of 7.9.15, launching clients behind a load balancer works, but the projects on each gateway MUST have identical UUIDs, meaning that all visualization gateways must be restored from the same Gateway backup, as project imports won't work.

SECS/GEM Messages

As of 7.9.15, custom response handlers will execute when receiving messages over the SECS-1 (serial) protocol.

New in 7.9.14

OPC-UA

Added "Advanced Configuration" page when configuring new UA client connections and automatic host override.

Logix Driver

The port on Logix driver device connections can now be configured.

Active Directory

The Cache Validation Timeout property can all now be disabled if set to a number less than zero on all user sources.

Gateway Configuration File Reference

New in 7.9.13

Cloud Templates have been migrated to the new Ignition Exchange.

Audit Profiles

Ignition Gateways can now create an Internal Audit Profile allowing an Ignition Gateway to store audit records without an external SQL database.

Connecting to a SLC Device

Added a Browse Cache Enabled setting to SLC device connections, which determines if browse results for the device should be cached.

File Menu

Ignition Exchange added as function in the File Menu of the Designer.

Gateway Security

Added the capability to set custom SSL Key Store alias and passwords.

Gateway Settings

Added Audit Profile option to Gateway settings.

Tag Export Localization

When exporting tags, we now include the designer's system locale and format numbers in the output according to that locale.

Web Browser Component

The Web Browser now has an Initialize extension function that triggers when the component is initialized.

Enterprise Administration

EAM Agent Restore Backup now includes an option to "Install Modules," providing an opportunity to apply modules while restoring from an Agent Backup.

Alarm Journal

- Ignition Gateways can now create an Internal Alarm Journal Profile, which stores journal entries in the Gateway's internal database, instead of an external SQL database.
- Added a local Audit Profile option to standard edition Gateways.

New in 7.9.12

Alarm Status Table

Added the Duration Format property to the Alarm Status Table. Format for the time units on the Active Duration column: Long, Short, Compact, and Abbreviated.

Voice Notification Module

Added a non-interactve alarm feature to stop any call scripts from being read by removing all text from that field.

OPC UA Endpoint

Two new server properties were added to the OPC UA connection settings.

Added Connect Timeout when opening a socket connection to a remote host, and Acknowledge Timeout to wait for an acknowledge message in response to the client's Hello message.

Audit Log

Updated the Audit Log information to include changes made directly to the Tags in the Tag Browser, as well as with scripting functions.

SECS/GEM Module

SECS/GEM Module added support for Oracle database.

Scripting Function system.eam.runTask

New scripting function system.eam.runTask is available. It takes the name of a task as an argument as a string (must be configured on the Controller before hand), attempts to execute the task. To run in the client, the user needs a role-based permission. This permission is disabled by default.

New in 7.9.11

Gateway Backups

Gateway Backup default filename format updated: **GatewayName_Ignition-backup-YYYYMMDD-HHMM.gwbk**

Added the option to change a Gateway Name when restoring a GWBK file.

Launching Clients

Applet launch option has been removed from Gateway home page, Client Launcher, and direct launch links. Applet client is still available if the exact url is used.

Launching Designer

Updated skeleton projects area available when creating a new project.

Expression Language

Added an Expression function to test Tag quality: isGood().

Numeric Aggregate expressions now return null, instead of 0 when there are no valid inputs.

New in 7.9.10

Native Client Launcher

The Native Client Launcher now has Java 9 embedded in it, so java no longer needs to be installed to run the NCL.

Named Queries

Named Queries now return the fallback value when no value gets returned, lining up with SQL calls elsewhere in Ignition.

New in 7.9.9

Edge

The 500 tag limit in Edge has been removed. Edge can now support an unlimited number of tags, just like Ignition.

Mobile Module

Added the Session Invalidation Retry Count property, which allows mobile clients to attempt to reconnect if the session is invalidated.

MySQL

The installer contains a JDBC driver that is compatible with MySQL 8.0+. New installations of Ignition will utilize the new driver, while older installations that are upgraded to 7.9.9+ will use the older driver to preserve connections to legacy MySQL installations.

Named Queries

Named Query parameters now support byte arrays.

Scripting

The system.util.getSessionInfo function now supports the use of keyword arguments.

Vision

The Document Viewer - Deprecated component has been deprecated. Similar functionality can be achieved with other Input components by utilizing HTML formatting. Instances of the Document Viewer that were created before this version will still exist after upgrading, but new instances can not be created from the Component Palette.

New in 7.9.8

Alarming

A new Label property has been added to alarm configurations, allowing a dynamic name to be associated with each alarm.

Designer

When resolving conflicts during a Project Restore, you can now choose to Overwrite All or Skip All resources in the project file.

Expressions

Colors entered as strings with the toColor function can now use American or British English spelling throughout (eg, 'grey' or 'gray')

Reporting

When scheduling a report, the Email Action can now specified a "reply to" email address. Additionally, the system.report.executeAndDistribute function can also specify a "reply to" when emailing a report.

Scripting

A new optional parameter has been added to both the system.dataset.dataSetToExcel and system.dataset.exportExcel functions. This parameter allows NULL values to be represented as empty cells, instead of defaulting to a 0.

Both system.tag.editTag and system.tag.editTags can now be used to edit members of a nested UDT instance.

Introduced the system.math library, providing quick access many common aggregates.

Security

The Gateway can now be configured to adhere to a HTTP Strict Transport Security (HSTS) policy.

SFC

The return parameters provided by the Enclosing Step can now be assigned to scope parameters.

Web Browser Component

The Web Browser Component has been updated to utilize version 6.18 of the JXBrowser.

New in 7.9.7

Scripting

Added the system.dataset.formatDates(), system.dataset.appendDataset(), system.dataset.clearDataset(), and system.dataset.addRows() functions to allow for greater control over datasets.

Added the system.user.isUserScheduled() and system.user.getScheduledUsers() functions to allow for greater control over datasets.

Reporting

The configureChart function that is present on all Report Charts can now access Report Parameters and Datasets.

Tags

Added new Client System Tags that provide Date Formats that change with Locale.

Added a new Gateway System Tags for system uptime (in seconds).

Logs

Added MDC Key Filters that allow you to filter the Logs in the Gateway by an MDC Key.

Security

Added the ability to shelve remote alarms. This has also added a new setting for Service Security under the Alarming section.

Transaction Groups

Added two new properties of Transaction Groups that will substitute in a default value for a group item, instead of using a value of NULL.

Components

The Alarm Status Table now has a getAlarms() function that will grab the alarms currently listed in the table.

SECS/GEM

Can now send a custom response when receiving certain messages from the equipment using the Message Handler system.

New in 7.9.6

Java 9

Ignition now supports Java 9 for the Gateway, Clients, and Designers.

Named Queries

Named Queries may now be called from Client Tags.

SQL Query bindings with an enabled Update Query that are converted to a Named Query will now create two separate Named Queries: a Select Query, and an Update Query.

EAM

Global Resources, as well as the whole Global Project, may now be selected as the source for the Send Project and Send Project Resources tasks.

OPC-UA

The maximum number of references per node on an OPC-UA server can now be configured.

Scripting

Added the system.db.clearNamedQueryCache and system.db.clearAllNamedQueryCaches functions to allow for more control over the cached generated by Named Queries.

Tags

Array OPC Tags can now write back to the device.

New in 7.9.5

Scripting

Added a scripting function system.file.openFiles() to allow for the opening of multiple files.

The scripting function system.net.sendEmail() now has a new replyTo property, allowing you to set a reply to field for your email.

Added the scripting functions system.user.addRole(), system.user.editRole(), and system.user.removeRole() to allow roles to be customized in scripting.

Expressions

Added isAlarmActiveFiltered expression function, which as a more filtered version of isAlarmActive, allowing you to more precisely control what triggers the expression.

Reports

The Report Table component can now have cells be multi selected using shift or alt. It also has new/modified table group properties Start on New Page and New Page per Row.

Added a Report Loading property into the Report Viewer component.

Reports can now be exported using the XLS format using the scheduled actions.

Datasets

PyDataSets can now be accessed using the Dataset functions.

User and Schedule Management

The User Management component and the Schedule Management component now have properties that allow you to customize their color schemes.

EAM

Added a new Send Tags task, which allows tags to be sent to other Gateways through EAM.

Text Area

The Text Area component now has a Tab Size property that allows you to set the size of tab characters.

SFCs

Sequential Function Charts now support redundancy and persistence.

New in 7.9.4

Named Queries

Introduced Named Queries, a new resource that allows a project to request the execution of preconfigured queries. This includes the addition of a new type of binding, the Named Query Binding, a new type of report datasource, the Named Query Datasource, as well as a new scripting function, system.db.runNamedQuery().

Client Permissions

Added Project Properties to limit client access to certain tasks. When restricted, access may be granted by Role and/or Security Zone.

Dynamic Rosters

Notification Blocks in Alarm Pipelines cay now dynamically generate a Roster with the new Calculated roster type.

Linear Regression

Added a new Calculated Pen option for the Easy Chart.

Gateway Message Handler Security

Gateway Message Handlers now allow security to be set on them in the form of security zone and role name combinations.

User Management Extension Functions

The User Management component got a few new extension functions: onDeleteRole, onCreateRole, and onCreateUser.

Schedule Management Extension Functions

The Schedule Management component got a few new extension functions: onCreateSchedule, onDeleteSchedule, onCreateHoliday, onDeleteHoliday.

New in 7.9.3

Scripting

Added system.util.sendRequest() and system.util.sendRequestAsync(), both of which send a message using the message handlers and wait for a return.

Easy Chart

The X-Trace Track Mouse property has been added to the Easy Chart. This allows the X-Trace to automatically follow the mouse cursor.

New In 7.9.2

Ignition Edge

Introduced a new software called Ignition Edge. Based on the Ignition platform, Edge is scaled down to help reduce cost and is perfect for placing at the edge of the network where data collection and processing may be difficult.

OPC Optimistic Writes

Added an OPC Optimistic Writes setting to scan classes that will apply written values to OPC Tags immediately instead of waiting for confirmation from the plc.

Derived Tags

Added a new Tag Type called the Derived Tag, allowing you to refer to other Tags and use an expression on them to manipulate them into a new value.

Scripting

Added system.gui.getCurrentDesktop() to return the current Desktop Handle.

Remote Agent Upgrade

EAM Agent system upgrades may now be performed from the Controller by using the Remote Upgrade feature.

Email Notification

A Simple One-way Email Notification type has been added.

New In 7.9.1

Tags

Added a "Trust Remote Roles" option for other Gateways in the network. This allows remote users to satisfy Tag permissions as long as the remote rolename matches the source rolename.

Components

Added onDeleteUser Extension Function to the User Management component.

Alarming

Acknowledge messages are now customizable for SMS notification pipeline blocks.

Added an option to acknowledge alarms via email using POP3.

Scripting

Added system.date.parse() to convert a string into a date.

Reporting

Added the ability to bind number and date formats in Text Shape components.

New In 7.9

Gateway Webpage

Complete overhaul to look and feel of the Gateway Webpage. There are many updates to aid troubleshooting and self-diagnosis of your system. New logger system that gives better searching and filtering options. Automatically filtered loggers on each device/connection/etc. page, and the ability drill into any item.

Distributed Services

View and interact with Tags from any Gateway in your network. This allows for many more architectures including true scale-out systems.

- Remote Tag Provider: Read and write to Tags on a remote system from any Gateway in your network.
- Remote History Provider: View Historical Tag data from anywhere. Access data from any Ignition without dealing with additional database connections.
- Remote Alarm Provider: Manage your alarm notification systems in one place. Allows any alarm throughout the Gateway Network to access these Notification Profiles and Pipelines.

Global Templates

Create templates in the Global space to give all projects on your Gateway access to those templates.

Multi-Monitor Support

The Vision modules now lets you open multiple client frames sharing the same client resources (user credentials, Client Tags). Interact with windows in each client frame from any other frame.

Security Zones

Restrict access to various services (remote Tags, Alarms, Pipelines, etc.) based on the Gateway trying to access it.

User Password Policies

Set password policies for your users. Enforce password length and complexity, force password updates, and restrict re-use.

Multiple Licences

Activate multiple licences on one Ignition Gateway. Add 3rd party modules simply, or combine licenses with ease.

ARM Support

Install Ignition on ARM processors.

OPC Array Read/Write

Write support has been added to array Tags.

Modbus Write Optimizations

Limit the size of Modbus OPC-UA writes.

Enable/Disable UA Connections

Enable or disable UPC-UA connections through scripting calls.

Power Table changes

Power Table component now has View Dataset property and Copy Selection.

OPC-COM Tunneller Module

The OPC-COM Tunneller Module is not part of the normal release cycle. It can still be downloaded from the 7.8.5 downloads page, and that version will work just fine with Ignition 7.9.