

# Release Notes for Enterprise Application 4.5

## Brief Summary

Enterprise Application 4.5 introduces major updates in authentication and security, enabling OpenID as an additional provider and supporting JWT assertions for stronger authentication. The release expands product integration with Generic EA Support, allowing status and heartbeat data from both SICK and third-party products.

Significant improvements are delivered across the Configuration Dashboard, Tree View, List View, and Map View, streamlining setup and enhancing usability. Additional features include a dedicated Offline Products page, redesigned navigation icons, improved reporting with direct PDF downloads, clear MAC address visibility after installation, and performance enhancements with pagination in Health and Performance tables.

This release ensures stronger security, broader product compatibility, simplified workflows, and improved monitoring across the Enterprise Application platform.

## Software Download

The software is available here:

## Use Cases of the New Release

### Critical Use Cases

*Scenarios where upgrading to EA 4.5 is mandatory to resolve critical issues or ensure system stability:*

#### 1. **Authentication & Security (OIDC / OpenID)**

- OpenID has been added as an additional authentication provider alongside Database and LDAP. Groups can now be dynamically assigned based on OIDC/EntraID roles, giving administrators more flexibility in managing access.
- Authentication has been strengthened with support for JWT assertions instead of client secrets.
- The settings and UI now include tenant ID and client secret options, allowing administrators to choose between Client Secret or JWT Assertion.

## 2. **Generic EA Support**

Enterprise Application now supports status information from any SICK or third-party product.

- Standardized integration: Status and heartbeat data are accepted through the new PRODUCT\_DATA\_STATUS MQTT topic using a JSON schema.
- Cross-application visibility: Backend and frontend updates enable product status to appear in the Dashboard, Tree View, List View, and Configuration pages.
- Flexible product handling: The system supports product type management, editing, and NR/MQTT connectivity.

## **Recommended Use Cases**

*Scenarios where upgrading to EA 4.5 is recommended to take advantage of new features and improvements:*

### **1. Configuration Dashboard Updates**

- The Facilities section has been renamed to Products, with a consolidated Configure Product option. The redundant “Add Single Product” entry point has been removed, while the ability to edit existing products and enable MQTT connections for multiple facilities remains.
- Facility Groups have been renamed to Product Groups, with a unified Configure Product Group option replacing separate add/edit flows.
- Regions management has been simplified by merging separate Add Region and Edit Region actions into a single Configure Region option.
- These updates streamline setup, reduce redundant steps, and ensure consistency with the Generic EA model.

### **2. Tree View Enhancements**

The Tree View has been improved in multiple areas:

- The Dashboard header icon has been refreshed with a modern design. The icon now appears only after a valid license is applied, controlled by a new license key.
- A new NONE product state has been introduced to represent cases where no state is available. This state is displayed in the Summary Panel, Filters Panel, and footer legend in blue.

- Statistics displayed inside nodes now wrap to the next line instead of being truncated with tooltips.
- Zoom and pan are supported through keyboard shortcuts (+, -, arrow keys), footer buttons, and mouse/touchpad controls.
- Dropdowns in Tree View now support auto-complete search with type-ahead filtering, highlighted matches, and automatic refresh when new options are selected.

### **3. Search & Navigation**

Search type and results are now retained when navigating between pages or after logging back in. They are cleared only when the page is refreshed, ensuring continuity and convenience.

### **4. List View Improvements**

- List View has been enhanced for better usability. Region and Country details in the Chart Container are no longer clickable, and the Region icon now appears only when information is available.
- A new DataType filter allows users to refine results. When selected, both the Statistics and Product State columns update dynamically.

### **5. Map View Improvements**

Map View now displays Product State based on the selected DataType. A new NONE state, shown in light blue, appears when no status is available.

Additional improvements include:

- Products can be opened directly in a new browser tab from Map View and List View.
- Autocomplete search is now available for region, country, state, and product, with real-time highlighting.
- The Product Info modal has been updated with an "Open in New Tab" icon and dynamic statistics by DataType.
- Cluster colors: Red – error, Orange – warning, Gray – offline, Green – OK.
- Region and country dropdowns in the Dashboard Map View have been standardized for alignment, font size, and arrow icons.

### **6. MAC Address Visibility After Installation**

After installation, users are redirected to the License & Registration page, where the system MAC Address is clearly displayed and can be copied easily. This simplifies license creation and reduces setup delays.

## 7. Offline Products Page

A new Offline Products page provides a centralized view of all offline products.

- The list refreshes automatically every one minute.
- Users can also refresh manually.
- Search functionality is available within the offline products list.
- Products can be opened directly in a new tab.

## 8. Download Reports Icon in Navbar

The Download Reports icon in the left navigation bar has been redesigned. The previous icon was similar to the Info icon and caused confusion; it has now been replaced with a clear, distinct download icon.

## 9. Reports & Configurations

- A new Download Reports feature in the UI allows users to directly download PDF reports stored in the server's reports folder without remoting into the machine. This improves usability and security, similar to the existing log download capability.
- Deployment ID length support has been increased from 10 to 36 characters.  
Localization files are now version-controlled, ensuring only relevant ones load at startup.
- A snackbar notification confirms when system MAC addresses are copied. Notification frequency settings have been extended, with the maximum interval increased from 10 minutes to 1 hour.

## 10. Health & Performance

Health and Performance tables now include pagination, allowing smoother rendering and navigation when working with large datasets.

## New Features & Difference to Former Versions

| S.No | Summary                                                                                                              |
|------|----------------------------------------------------------------------------------------------------------------------|
| 1    | A new page in Enterprise to display the offline products                                                             |
| 2    | Brainstorming & Mockup > Overall summary information & Focus/Filter mode improvements design in Tree & Network graph |
| 3    | EV > Dashboard > List/Table View Updates for Generic Enterprise                                                      |
| 4    | Make EA Generic for all SICK products - Design                                                                       |
| 5    | Pagination in Health Status and Performance Status                                                                   |
| 6    | Product State should be displayed based on the selected data type in List View                                       |

|    |                                                                                                                                                                                                                              |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7  | [EA] Integrate InfluxDB into EA                                                                                                                                                                                              |
| 8  | [EA] Update Mui from v3 to v4 & Fix the broken UI after the update in the whole app                                                                                                                                          |
| 9  | [EA] Update package dependencies, Integrate the latest version of react, axios, react-router-dom, MUI 4 Typography changes & Restructuring Configuration Module & layouts code, Integrate Eslint to improve code readability |
| 10 | [RESEARCH] Make EA generic for all products feasibility study & Design                                                                                                                                                       |

## Improvements on existing features

|    |                                                                                                                                       |
|----|---------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Handling of Epoch String as well in DateTime related fields in Heartbeat like firstOccurrence or lastOccurrence and etc               |
| 2  | Update security to block ECDHE, CBC-mode ciphers                                                                                      |
| 3  | Panda Dashboard > Font and data alignment in tables should be consistent in all dashboards                                            |
| 4  | Panda – Improve X-axis time grouping in Application Overview graphs for Shift and One Day selections                                  |
| 5  | Overmax – Barcode should have % in default to let user know that user can provide % as input (as we are showing in Search by Barcode) |
| 6  | Restrict access to client secret in /openid/settings API                                                                              |
| 7  | System Health Status should not change when repeated old Error comes again & again.                                                   |
| 8  | Multi Barcode Search                                                                                                                  |
| 9  | Sanitize error messages of /encrypt/pemkey API                                                                                        |
| 10 | Update OIDC logic to allow configurable PA groups based on OIDC role                                                                  |
| 11 | Panda > Update Applicator-0 to UNASSIGNED and display at the bottom row                                                               |
| 12 | Update MySQL Component                                                                                                                |
| 13 | Add Image URLs to MQTT Live-feed                                                                                                      |
| 14 | If user logs out from an Open ID application, it should log him out of Open ID as well                                                |
| 15 | Add Image URLs to Search Results                                                                                                      |
| 16 | Hover to See Full Device Name                                                                                                         |

## Bugfixes

In this release, a few bugs have been fixed to improve overall system stability and usability.

However, the following known issues remain unresolved:

| S.No | Summary                                                                                                                                 |
|------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1    | [Installer] EA > MySQL and Logs folder, when stored on a different location, does not get removed after the application is uninstalled. |

## Additional Information

### Customer Required Actions

### Hardware & Software Compatibility

- Compatible with supported PA hardware and OS versions.
- Requires updated MySQL version (8.4.5) for backend operations.

## Known Limitations & Issues

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