

DIGITAL INDUSTRIES SOFTWARE

What's new in Opcenter Execution Semiconductor 2210

Using single-item tracking enhancements for automation and Restful API extensions

Benefits

- Execute transactions with highly automated process models
- Use the new operator home user interface to provide operational areas with more visual cues and dynamic interactions
- Use updated UIs and interfaces to improve user experience with less white spaces and scrolling and improved controls
- Extend configuration capabilities and discovery and documentation while enhancing transactional performance

Summary

Opcenter[™] Execution Semiconductor (EX SM) is a comprehensive manufacturing execution system (MES) that enables wafer fabrication factories and assembly and test sites to meet traceability requirements, control production and integrate shop floor operations into its enterprise resource planning (ERP) system. Use Opcenter EX SM to address your needs on a configurable, scalable and modular platform for production. Opcenter is part of the Siemens Xcelerator portfolio, the comprehensive and integrated portfolio of software, hardware and services.

This release contains single-item tracking enhancements to support automation, updated user interfaces (UIs), performance enhancements and more.

New features and enhancements

Single-item tracking enhancements

- Verify loading lot into slot positions with enhanced scsCarrierPositionAssign transaction
- Use added server validation for numbering rules in PN modeling object for products and container-level functionality that is utilized by the automation layer

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- Use enhanced scsDBContainerClosure transaction to enable the transaction of tracked-in container(s)
- Allow for recipe inquiry without the need for insertion dependency
- Provide a method to return container names with work order dispatch/lot start high-performance engineering (HPE) in the service response document
- Use enhanced scsCarrierPositionAssign transaction to unload an item without specifying the position
- Leverage enhanced scsDBContainerClosure transaction to allow a flag to auto-disassociate a container without specifying parent for automation for improved efficiency
- Leverage standard core parent/child equipment configuration and functionality using Opcenter EX SM

Enhanced user interfaces provide improved user experience New operator landing page (phase one)

- Equipped with a role-based starting page
- Displays key operational info and allows lot and equipment selection to start lot processing moving directly into work in progress (WIP) main
- Updated with lot and equipment info if line assignment is completed
- Leverages a smart interface updates sections of UI based on previous selections by the operator
- Provides more visual cues, simple and intuitive UI that guides the operator through their actions



Modeling

- Improved layout for product, spec, process timers and workflow
 - Processes timer, product and spec UIs
 - Reduces white space
 - Groups components to reduce scrolling
 - Expands workflow to fill entire UI section window for easier editing of complex workflows

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Introducing a new matrix page layout

- New format for matrix pages uses the new search format to search for matrix with popup for configuring new matrices
- Command bar icons allow for modeling of new matrices or editing a matrix that opens in full screen UI
- Five matrices converted to the new format, equipment, recipe, tool plan, WIP data setup and blanket experiments

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Menu navigation enhancements

 Allows name selection, enhanced pinning of menu that resizes active page and dynamic menu bar sizing based on menu text

Semiconductor – electronics synergy (phase one)

This is the first phase of migrating objects that enables you to execute semiconductor and electronics products in a single installation with the following features:

- A standardized maintenance job management functionality for all Opcenter Execution Core products migrating the existing Opcenter Execution Semiconductor functionality to Opcenter Execution Core and aligning the objects with Opcenter Execution Electronics
 - Job management that allows users to configure and execute equipment repair and maintenance jobs

- The job management functionality is new to Opcenter Execution Core and Opcenter Execution Medical Device and Diagnostics products
- Supports sites with vertical integration of manufacturing

HPE and application server optimizations

- Implement Oracle HPE structured query language (SQL) and indexing optimizations within the HPE stored procedures to optimize transaction execution

 Improve transaction times and stability for HPE transactions
- Implement an app server enhancement to address an issue found during HPE framework performance testing
 - When processing transactions in a high throughput environment, you may experience intermittent transaction failures under specific conditions below:
 - Multiple threads are accessing the same configurable data object (CDO) simultaneously
 - The CDO contains a field with a list
 - Implemented in 2210, field fix available for 8.9

Semiconductor enhancements

• Use Opcenter EX SM to allow standard core parent/child equipment configuration and functionality

Restful API enhancements (CORE)

- Extends the configuration tasks in management studio to support:
 - Enabling and disabling on demand DLLs
 - Entering Restful API authentication credentials
 Stopping Restful API services
 - Improving the performance of transaction execution per second by 15 percent
 - Improving the discoverability by utilizing swagger UI
 - Delivering enhanced documentation by providing examples in postman collection formats

Single sign-on enhancements (CORE)

- Supports the security assertion markup language (SAML) adapter with the user management component (UMC)
- Supports the MyID identity provider via UMC

Outbound message enhancements (CORE)

- Supports these additional outbound message formats – XML
 - JSON
 - -RAW
- Enhances response and error handling
- Improves the configuration with external applications

Product release fixes

• For the list of product releases (PRs) addressed, please see the release notes

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