Extending Opcenter Planner with custom window support

Benefits
- Opcenter Planner extensibility
  - Extended personalization and tailored tools based on customer business requirements
  - Ability to interact through extensions with underlying data model
  - Greater cross-industry flexibility to adjust application requirements
- Large dataset editor performance improvements

Features
- Planner extensibility
  - Custom window (OCX) support
  - Planner .net API
- Improved Planner move logic
- Improved reason not allocated API
- Large data list performance improvements
- Updated integration with Opcenter Scheduling Electronics (formerly Valor Production Plan)

Summary
Opcenter™ Advanced Planning and Scheduling (Opcenter APS) software is a family of production planning and scheduling products that improve the synchronization of your manufacturing processes. This gives you greater visibility and control, enabling you to increase resource utilization and on-time delivery, while reducing inventory levels and waste. Opcenter APS, part of Xcelerator, a comprehensive and integrated portfolio of software and services from Siemens Digital Industries Software, is a highly customizable capacity planning and scheduling package.

Capabilities
Opcenter Planner extensibility
Custom window support

Leveraging functionality already adopted in Opcenter Scheduling (Opcenter SC), Opcenter Planner now offers the ability to extend the planner module with the inclusion of custom window support. By adding to the extensions of user-defined tools introduced in version 17.2, the same level of flexibility is available across both product ranges.

Adding support for custom windows allows customer enhancements to be created to support business requirements. For example:

- Providing a planning dashboard for applying business logic before or after calculation of master production schedule (MPS)
- Dashboards for customer specific key performance indicators (KPIs), comparison scenarios, etc.

.net Opcenter Planner API

```c
// Run Calculate Stock preactor
.Opcenter.Planner.CalculateStock();
```

Adding to the already extensive software development kit (SDK) covering both standard functionality and sequencer-specific application program interface (API) methods, a new set of Opcenter Planner API methods have been introduced giving you the ability to interact with the Opcenter Planner module through .net.

Improved Planner move logic

Opcenter Planner has a range of inbuilt planning modes:

![Planning Modes](siemens.com)
What’s new in Opcenter Advanced Planning and Scheduling version 18.2

- Infinite Capacity
- Move
- Move Then Constrain
- Constrain Then Move

This range of inbuilt planning modes calculate how capacity is consumed during each planning period.

Improvements have been made to the utilization of items on the primary resource when using Move, Move Then Constrain, and Constrain Then Move planning modes.

In addition to improvements to the logic of primary resource utilization, the hard constraints used when calculating MPS can now be relaxed in order to improve utilization of alternative planning resources using Move, Move Then Constrain, and Constraint Then Move.

Custom ‘Reason item not allocated’
Opcenter SC has introduced two new API methods to help improve user feedback when custom scheduling rules are implemented, providing business-defined messages when operations are unable to be scheduled.

Editor performance improvements
Across both Opcenter APS products, Opcenter SC and Opcenter PL, performance improvements have been made when editing large datasets.

The editor dialog’s behavior changes depending on the data volume and structure when referencing additional fields or tables.

Opcenter Scheduling Electronics rebranding alignment
Valor Production Plan has been rebranded to Opcenter Scheduling Electronics (Opcenter SC EL). Integration settings have been updated to reflect this change, along with minor improvements to integration.