Summary
Siemens Opcenter™ software, Research Development and Laboratory (RD&L) 8.0 is the next version released on the new-generation platform formerly known as the SIMATIC IT (SIT) R&D Suite. Siemens Opcenter Research Development and Laboratory represents a major technological evolution, providing lightweight client applications to the user, employing web technology and HTML5. This release is primarily focused on plate management, multi-level formulation and regulatory enhancements.

Improvements in Siemens Opcenter Research Development and Laboratory 8.0 include:
- Lab information management system (LIMS)
  - Plate management
  - Data migration toolkit from SIT Unilab v6 (operational)
- Specification management
  - Formulation builder (multi-level formulation in compare view)
  - Data migration capabilities to initiate specification management data
- Regulatory enhancements
  - Support for cross-contaminants in allergen declaration
  - Synonyms and drop-down for component grouping
  - Relative quantity possibility for sub-components and groups
- Improved usability
  - Improvements to application usability and performance for more speed and efficiency
  - Frame refresh for multiple specifications
  - Access rights per user
- Technology
  - Optimized deployment on Amazon (AWS)
  - Runs on Windows Server 2019
- Other
  - Rebranding
  - Quality task for Siemens Opcenter Execution Foundation 3.1

Learn more about the complete list of enhancements and features in the software release notes.
What’s new in Siemens Opcenter RD&L 8.0

Plate management
Siemens Opcenter Research Development and Laboratory 8.0 provides support for microplate analysis in laboratories. It introduces a graphical representation of the plates for manual or automatic filling, result entry and validation. Dilution and multiple analysis (which are performed two or three times to verify repeatability) are included in the plate type configuration. It is possible to assign a plate as a child element to a request. The plate will be visible in the hierarchical grid view and hierarchy tree view of the request in the same way as the other child elements. This is used to group plates for storage or logistical reasons.

Contextual styling linked to layout allows you to highlight any relevant information for users: free wells, positive or negative results, assigned method. Result entry can be done by connecting the plate reader or by manual input using the linked worklist.

Plate templates are highly configurable to reflect the specificity of the kits laboratory purchase. A predefined lifecycle is available for plates. Following the same concept as a worksheet, it takes into account the lifecycle of the control samples to assess the validity of the plate. The lifecycle is included in the applied best practice lifecycles and delivered with Siemens Opcenter Research Development and Laboratory 8.0.
Formulation builder
In addition to the well-known formula workbench functionality, a new formulation builder view is available. The formulation builder makes it possible to experiment with multiple formulations at once. The advantage is that you can create and compare formulations in a side-by-side view. The formulation builder does not replace the formula workbench functionality or support its full scope. For advanced calculations, roll-ups and what-if type analysis, the formula workbench tool is still the right application to use. The formulation builder is a quick, simple editing tool that allows you to compose formulations side-by-side in an easy and intuitive way.

In formula builder you can add and remove existing formulations, create new ones from existing ones or from scratch, change quantities on every level and rescale from the top level.

All modifications are saved and available in a standard formula workbench view to continue, when needed, with advanced calculations and roll-ups, enabling the user to focus on one formulation. Formula builders can be accessed from the launchpad, able to name, open and save different builders grouping the formulations he or she is currently working on.