



SIMATIC IT Overall Equipment Effectiveness

V2.0

SIMATIC IT Product News

Answers for industry.

SIEMENS

IA AS MES (Manufacturing Execution System)

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SIMATIC IT Overall Equipment Effectiveness V2.0

SIMATIC IT Overall Equipment Effectiveness V2.0 release is planned for July 2009.

1 SIMATIC IT Overall Equipment Effectiveness Brief Description

SIMATIC IT OEE expands the basic functionality offered by SIMATIC IT Plant Performance Analyzer, leveraging its calculation capacity and providing dedicated configuration for the Downtime Management and for Overall Equipment Efficiency.

Furthermore, SIMATIC IT OEE provides dedicated functions for efficiency analysis, data acquisition and aggregation through Key Performance Indicators (availability, performance, quality, OEE and many others, including custom ones).

To maximize the availability KPI, a full downtime management module is provided in which you can define a hierarchical Time Model. This enables you to perform distribution and root-cause analyses. GUI tools for OEE and downtime analysis are also provided as part of a comprehensive environment featuring charts and other graphs presented on the operator screen.

For more information, please refer to:
<http://www.siemens.com/mes-simaticit>

2 SIMATIC IT Overall Equipment Effectiveness V2.0 new major features

SIMATIC IT OEE 2.0 introduces many new features, such as:

1. Full integration with the SIMATIC IT CAB Portal
2. GUI enhancements
3. SIT-OEE Library based on Production Modeler
4. Acquisition Performance enhancements
5. Documentation of new features
6. General improvements

2.1 Full integration with the SIMATIC IT CAB Portal

The following pages are integrated in the SIMATIC IT CAB Portal as a Page Package that can be easily installed. The complete set of pages is as follows:

- OEE User Configuration
- DTM Viewer
- Counter Viewer

- Planned Downtime
- Design Speed Viewer
- Gantt Viewer
- KPI Viewer
- Counter Graph
- Grouped Counter
- Context Management
- Runtime Operator Panel
- Equipment Comparison

2.2 GUI Enhancements

KPI Viewer ActiveX

KPI Viewer has been improved to provide:

- Horizontal orientation feature for Bargraphs. In the property page there is a specific configuration where you can set the view mode: vertical (the only option until now) and horizontal.
- Configurable Pareto line colors
- A new COM method, `SetDefaultScaleUnit`, for setting the default UoM on the Y-scale in the KPI Viewer for algorithms that do not have a UOM.
- Modifiable line thickness in the trend graph display. The options include: Thin, Medium and Bold.

Gantt Viewer ActiveX

- Gantt Viewer has been improved to create complex pages in which one Gantt Viewer opens and manages another DTM Viewer when you click an item (for example, Equipment unit, Time Category, and Time span) to get context information to create a specific query. A new Mouse Click event has been implemented.

2.3 SIT-OEE Library based on Production Modeler

Thanks to the new features introduced in SIMATIC IT OEE V1.2 SP2 (**SetActualCFList** and **SetInducedDowntimeList**) the SIMATIC IT OEE V2.0 provides a set of automatic features for managing:

- Planned/Induced Downtime
- Set MES Context
- Simple Root Cause Analysis

These features are provided as an OEE Library (SIT-OEE) based on the plant model defined in SIMATIC IT Production Modeler.

2.4 Acquisition Performance Enhancements

Acquisition performances have been improved. From version 2.0 onwards, the acquisition performances are no longer noted in the context information.

2.5 Documentation of new features

This version includes the following new documents:

- OEE Library Manual: documentation for the OEE Library for SIMATIC IT Production Modeler.
- OEE Web Client Online Help: documentation for the OEE Web Client in CHM format.

Additionally, the following existing documents have been substantially updated:

- OEE Getting Started
- OEE Concept Guide
- OEE Functional Overview

2.6 General improvements

Report on-the-fly - Software installation on SQL Server machine

- A specific setup for OEE Report Manager must be executed on the SQL Server machine to install the new CLR Stored Procedure. In the OEE Configurator, you must manually configure the Web Service URL to which the new CLR Stored Procedure sends the http requests to compute and archive algorithms. You no longer need to install executable software on the database server machine.

Recovery Data Gap if no recovery option is selected

- If no recovery is selected, the product closes the record that was still open, with the timestamp of the stop time. This means that, without recovery, the data gap between the acquisition stop-start time spans is not filled. All status/counter/design speed records without recovery are closed with the stop time. Specifically, counter records are closed independently of their type. This new behavior does not apply to planned/induced downtime records.

CAB Clients Controls and ZAC installation Permissions

- Web Basic Services and Web Clients are typically installed automatically by using Zero Administration Cost (ZAC) technology. The required components are downloaded on-demand when a client workstation accesses them for the first time. Alternatively, you can install these components beforehand through a standard MSI package installation. This installation method is useful when SIMATIC IT is installed or updated through remote deployment tools like Microsoft SCCM, HP-Radia or Asdis.

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