ADMO

Maintenance management solution for protection systems

Keeping track with ADMO

The challenge

Proper functioning of the protection system with all its individual components has a major impact on the reliability of the bulk electric system. Therefore, proper testing of assets and regular maintenance are essential to keep the system in good working order. In addition, quick access to relevant test documentation is indispensable.

For efficient planning and in order to provide proof when requested, you must be able to answer the following questions at any time:

> When was the last maintenance test carried out for each component of the protection system?

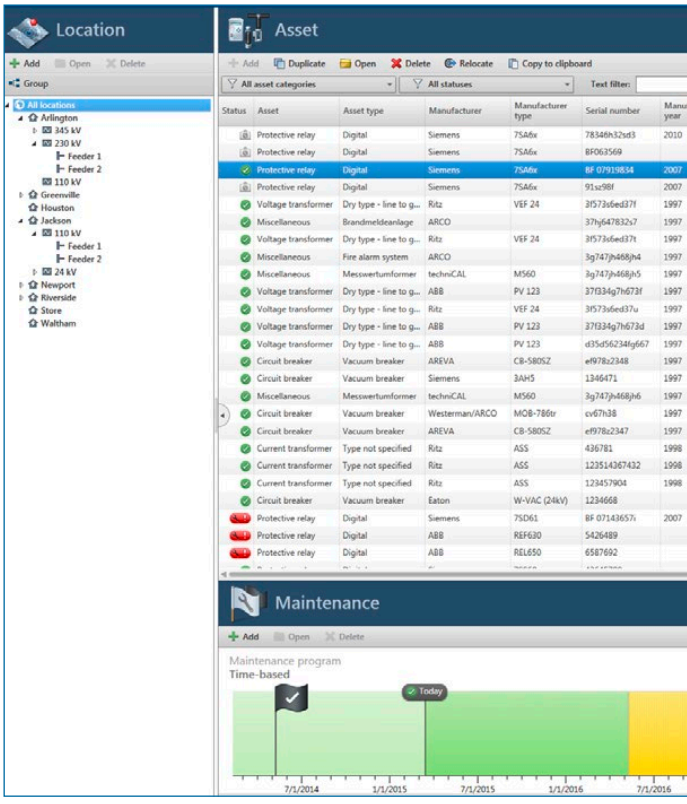
> When are the next maintenance tests scheduled?

> Where are the test reports (evidence for maintenance) for all the components?

> What is the testing and maintenance status of the overall protection system?

> Are the relevant test plans always available on site?

In practice, it is often difficult to keep track of maintenance schedules, test data and associated documents. For example, documents such as test plans, data sheets and test reports are often kept in various locations. This causes a lot of organizational overhead and makes it difficult to access these documents in case of a compliance audit.



Convenient and clear user interface

The solution

In order to provide user-friendly access to all information and documents, we offer the innovative solution. ADMO is an easy-to-use database software for central planning and management of all testing and maintenance activities for protection systems in the power industry.

You can manage the following protection system components:

> Communication systems

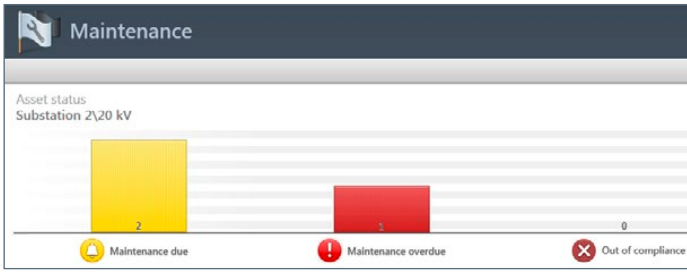
> Control circuitry

> Current and voltage transformers

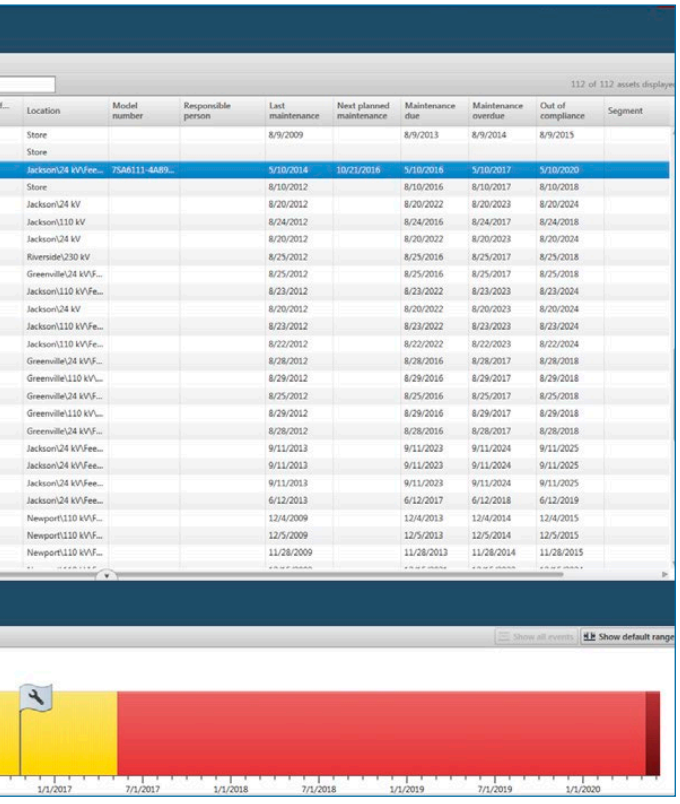
> Circuit breakers

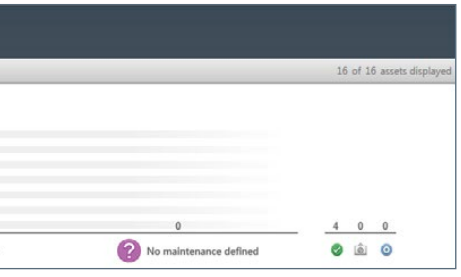
> Station DC supplies

> Energy meters



Maintenance status of all system components





For all assets managed with ADMO, asset data, location, maintenance cycles and all associated test documents are stored. The well-structured layout and the clearly arranged graphics allow you to see which maintenance events are currently due, as well as the current maintenance status of the various assets. Stored test documents and maintenance information are available at any time.

ADMO supports storing of OMICRON Test Universe test data, third-party test documents and documents individually created in Microsoft Excel, Microsoft Word or Adobe Acrobat (PDF) file formats. Of course you can attach graphic files as well (e.g., photos of the test set-up, screenshots).

Your benefits

> Fast and easy access to all test documents, also while testing in a substation without direct network access

> Well-structured management of maintenance tests

> Maintenance status overview of the complete protection system and its individual components

> Type- and manufacturer-specific management of documents in one central location

Convenient maintenance management

The functionality of ADMO is based on the interaction between three levels: Location – Asset – Maintenance. Once a location is defined, assets can be added by entering the component-specific data and the appropriate maintenance cycles. Subsequently, all related maintenance events are scheduled and managed at the maintenance level.

Location

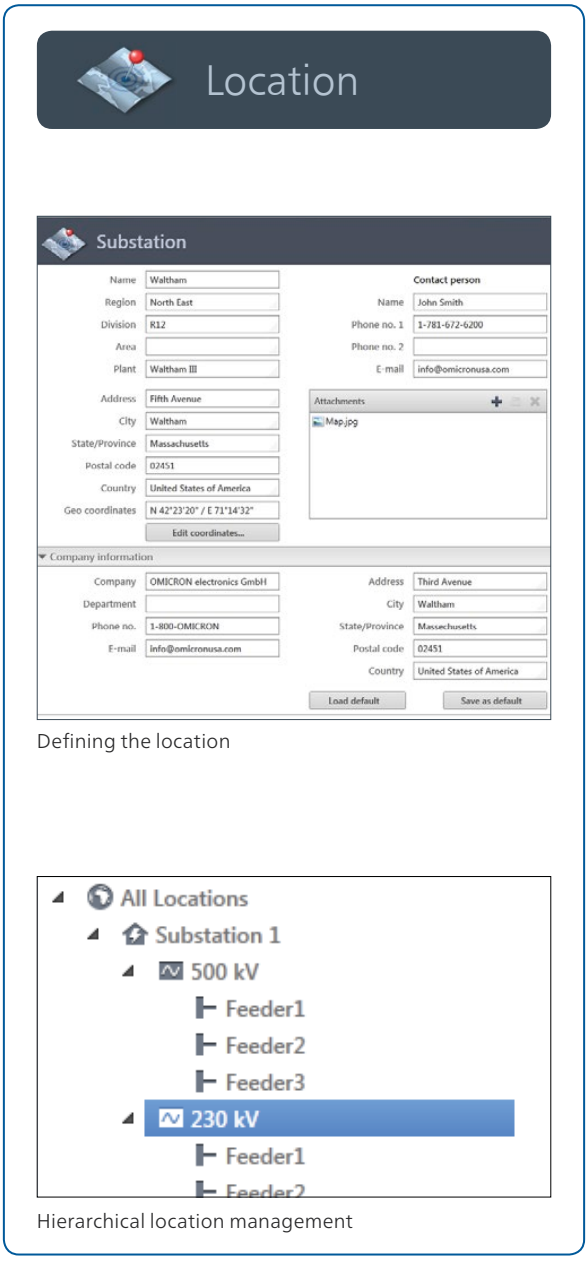
The hierarchically structured location management allows a clear representation of all relevant power stations and substations with their voltage levels and feeders. Locations can be grouped according to region and company. When you select a location, ADMO displays a maintenance status overview of all assigned assets.

Asset

System components to be added are assigned to a location and defined. The definition includes the precise data of the asset and its maintenance cycle. For the maintenance intervals individual settings can be selected. On completion of the input, the component appears in the overview with its current maintenance status. Important alterations are tracked in the History.

Maintenance

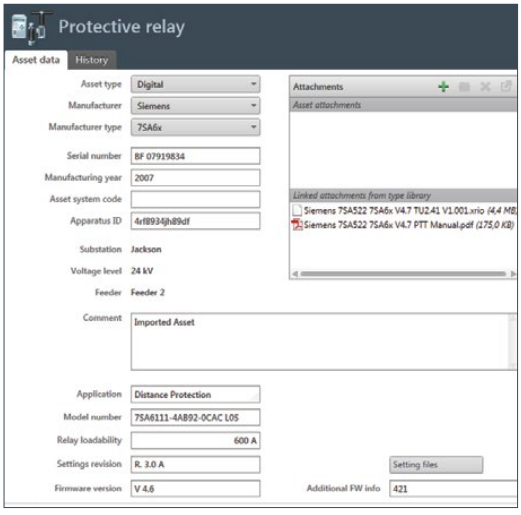
For a selected asset ADMO displays a timeline with the maintenance status and past and future activities. You can schedule maintenance events and archive your test data. Everything is well-organized, recorded and easily visible at a glance, from commissioning to scheduled and performed maintenance events. Associated test reports and measurement results can be retrieved quickly and easily.



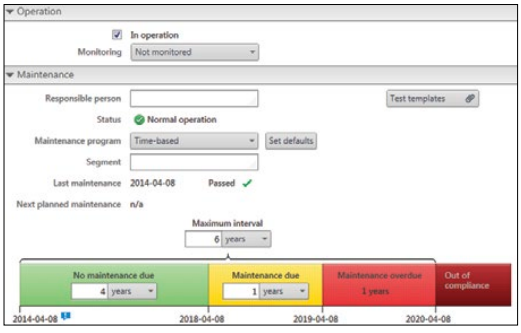
Defining the location

Hierarchical location management

Asset

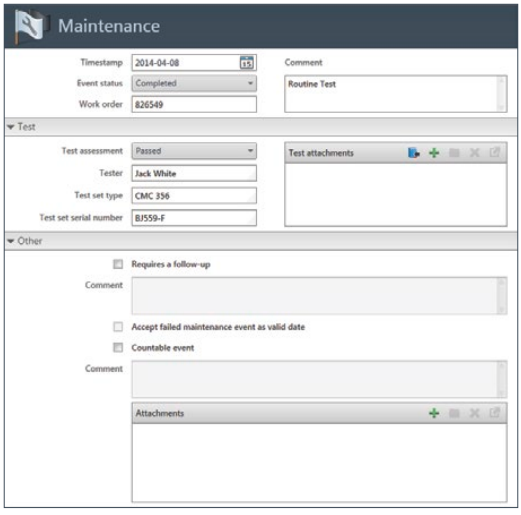


Defining assets ...

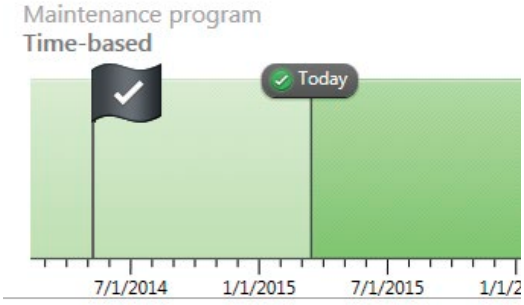


... and maintenance cycles

Maintenance

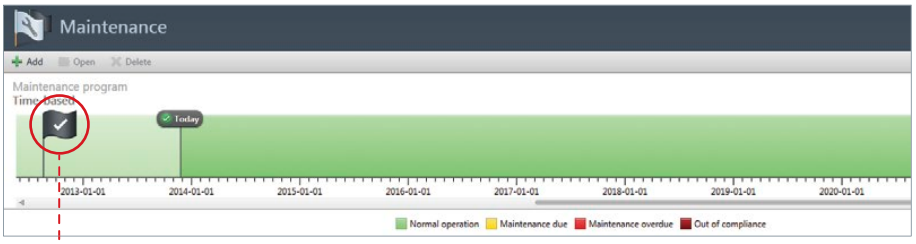


Managing and archiving test data



Maintenance program view

Track it or lose it

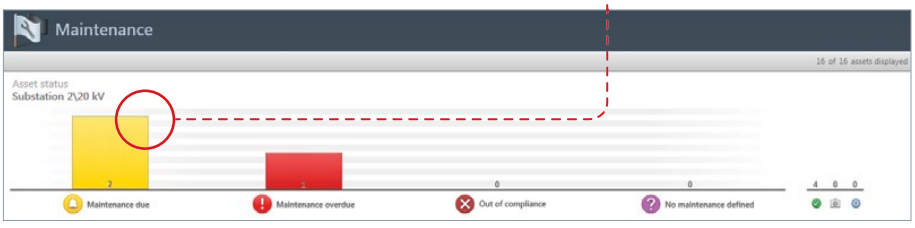


Easy access to test documents

Just click on the event flag to display all test data recorded for selected assets like test reports, OMICRON Control Center (OCC) test documents, etc.

Maintenance status overview

The maintenance status of the complete protection system or a selected sub-area is clearly visible.

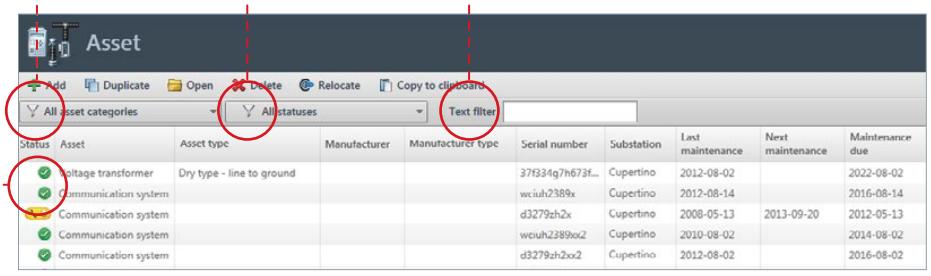


Maintenance status of individual assets

- Maintenance Required
- Maintenance Overdue
- No Maintenance Defined
- Out of Compliance

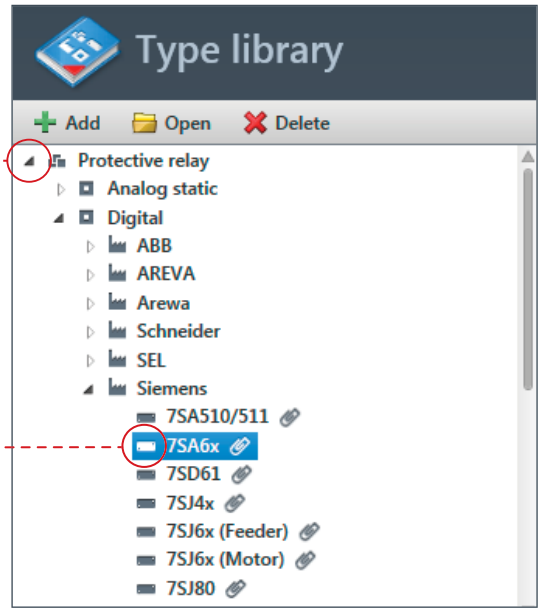
Search and filter functions

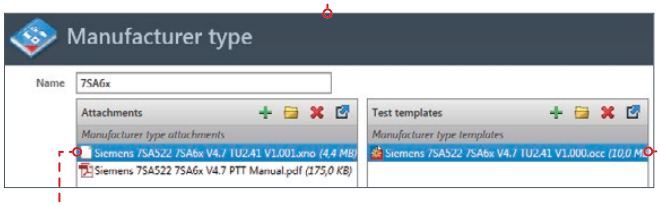
The search and filter functions facilitate quick access to test data and provide maximum productivity.

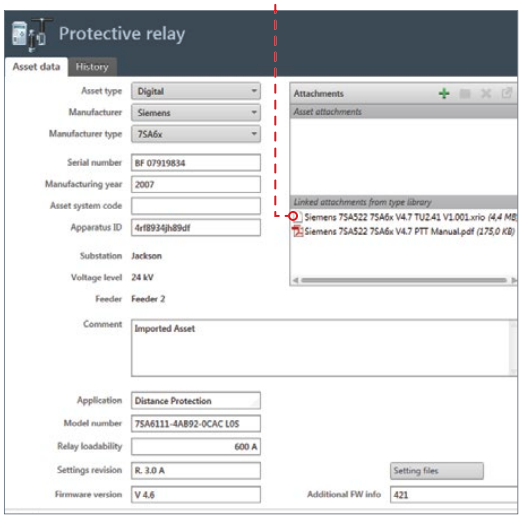


Management of test templates and asset related documentation

The type library allows you to deposit and maintain type- and manufacturer-specific documents in one central location in a simple structure tree.

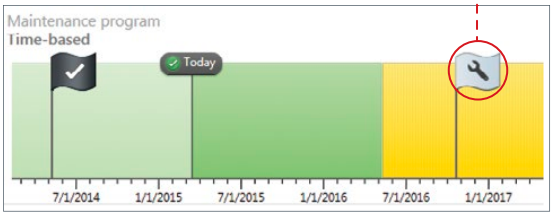






Type-specific document management

Easily assign documents to relevant type categories. All assigned documents appear at the specific assets and are easy to retrieve.



Test template management

The matching test templates from the type library and from the asset are directly available for testing. Start the test template (e.g. OCC file) from the event and save it with results as a test document automatically.

Import / export of location and asset data

Import

The import function facilitates initial data migration or occasional create/update requirements from leading asset management systems. Time-consuming population of the database is no longer necessary. ADMO supports the import of XML files from Microsoft Excel and OMICRON PTM (Primary Test Manager).

ADMO allows you to automatically create missing type library entries during import.

XML Import via Microsoft Excel

The XML import works by means of a provided Microsoft Excel template and is carried out in three simple steps:

1. Enter location and asset data into the template
2. Export table in XML format
3. Import XML file into ADMO

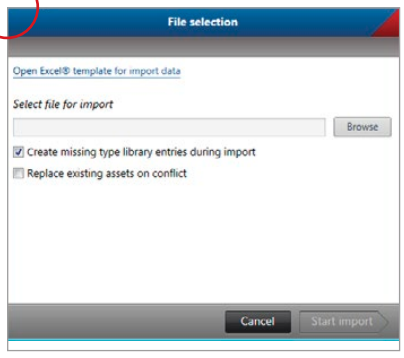
Example:

	A	B	C
1	Asset	Asset type	Manufacturer
2			
3	Protective Relay	Digital	SEL
4	Protective Relay	Digital	SEL
5	Protective Relay	Digital	SEL
6	Protective relay	Digital	SEL
7	Protective relay	Digital	SEL
8	Protective relay	Digital	SEL
9	Protective relay	Electro-Mechanical	ABB
10	Protective relay	Electro-Mechanical	ABB
11	Protective relay	Electro-Mechanical	ABB
12	Protective Relay	Digital	Siemens
13	Protective Relay	Digital	ABB
14	Protective Relay	Digital	Alstom
15	Protective Relay	Digital	Alstom
16	Station DC Supply	Nickel Cadmium Battery	
17	Station DC Supply	Nickel Cadmium Battery	
18	Station DC Supply	Nickel Cadmium Battery	
19	Station DC Supply	Nickel Cadmium Battery	
20	Station DC Supply	Nickel Cadmium Battery	
21	Current Transformer		Wirges
22	Current Transformer		Wirges
23	Current Transformer		Wirges
24	Current Transformer		Ritz
25	Current Transformer		Ritz
26	Current Transformer		Ritz
27	Circuit Breaker	Air-Blast Breaker	
28	Circuit Breaker	Air-Blast Breaker	
29	Circuit Breaker	Air-Blast Breaker	

Entering location and asset data into template

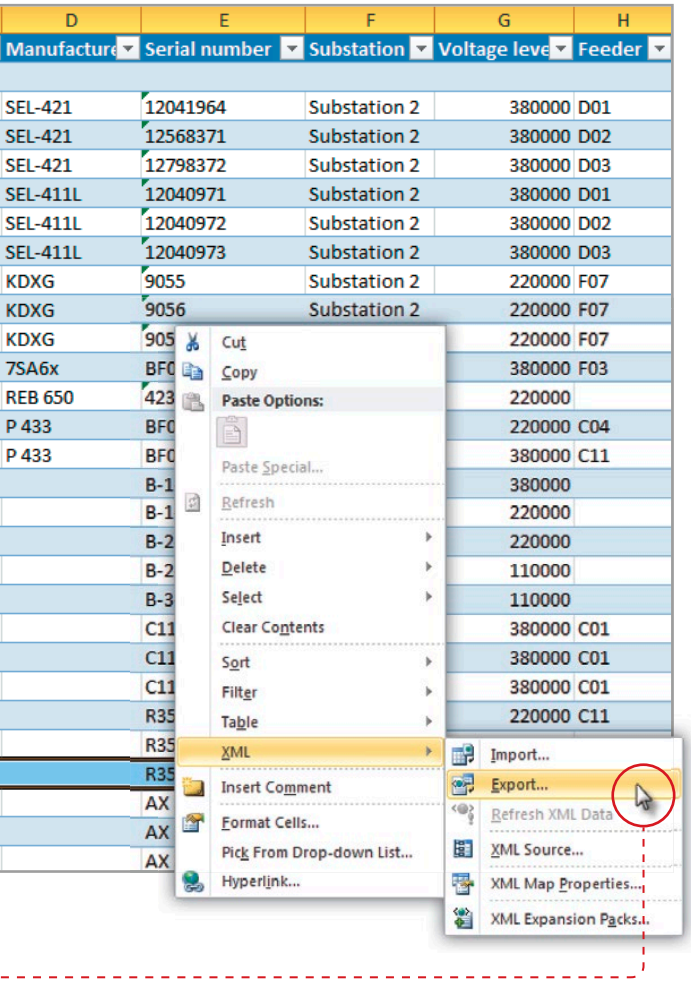
Export Microsoft Excel table in XML format

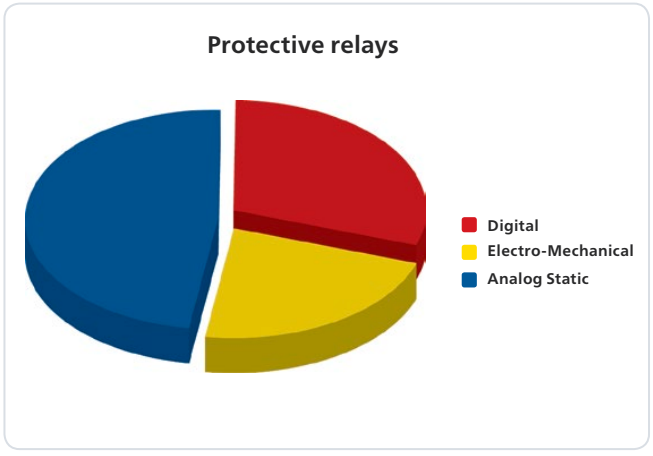
Import XML file into ADMO



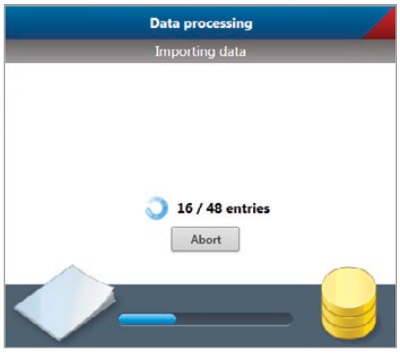
Export

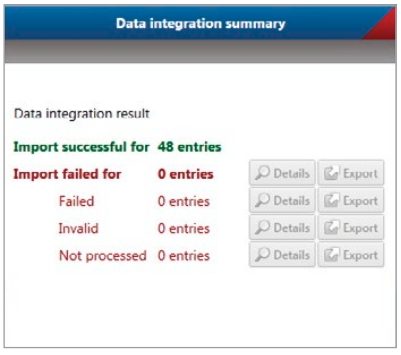
ADMO supports a basic copy-to-clipboard functionality. This allows you to use selected location and asset data in other applications (Microsoft Word, Microsoft Excel) for individual reporting and data analysis.





Individual data analysis in Microsoft Excel





Stay connected with ADMO

Multi-user functionality

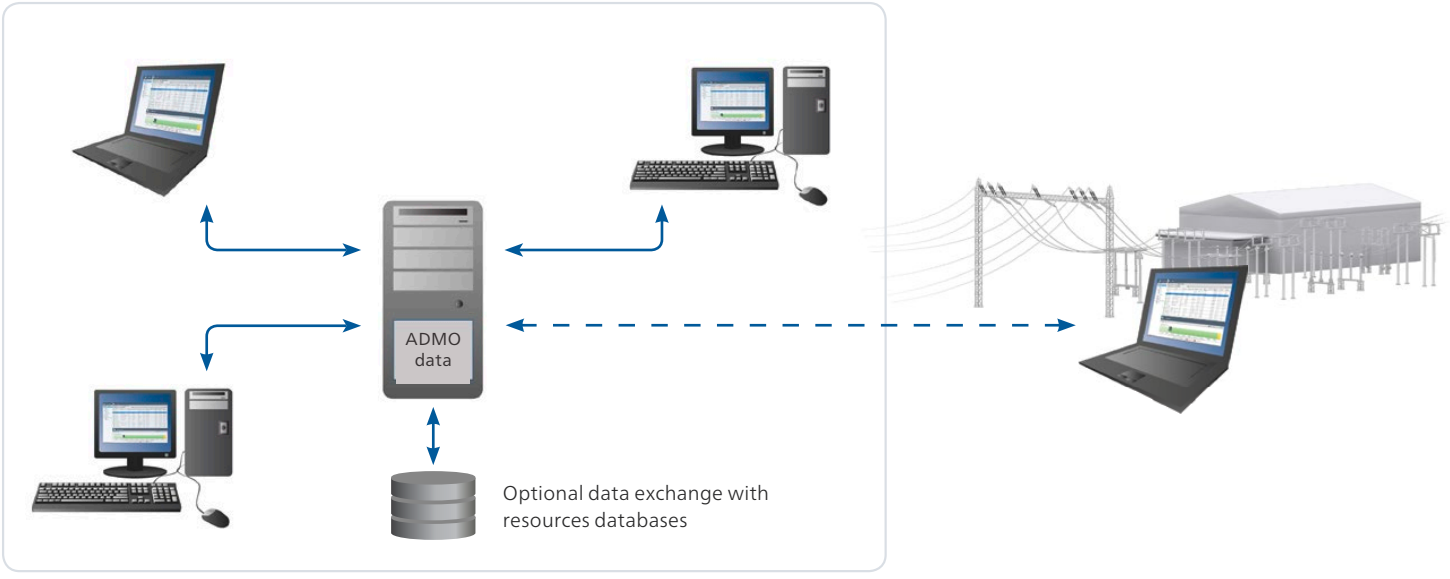
In bigger utilities multiple users manage and plan all maintenance activities. To keep track, they need to rely on a convenient maintenance management solution which fullfills their requirements.

The ADMO multi-user functionality (client-server edition) supports these requirements and allows users to work with ADMO from different locations simultaneously. The data is stored on a central SQL server and shared within the network. This allows central maintenance management and immediate access to test documents.

Users can create an offline copy of the ADMO database to have access to templates, instructions and related documents while testing in a substation without direct network access.

Multi-user benefits at a glance

> Multi-user access to central database
> Immediate availability of documents (user manuals, e.g.)
> Central administration of maintenance activities
> Upcoming maintenance tasks clearly visible for all users
> Source for templates, instructions and related documents while testing in a substation without direct network access
> Test results from the field can simply be synchronized to the database later on



Client-server edition: Access to ADMO database from several PCs in parallel and offline support while testing

ADMO license options

ADMO is available as client-server or standalone edition, depending on your individual requirements:

Stand-alone edition

The stand-alone edition is appropriate for smaller utilities where one user manages maintenance activities.

Client-server edition

The client-server edition is suitable for larger utilities where several users work in parallel, using the same database.

Simple user interface

ADMO's user interface is clear and intuitively designed, meaning even new users can become accustomed to it quickly. As a result, ADMO simplifies a user's tasks every day and helps them avoid making errors.

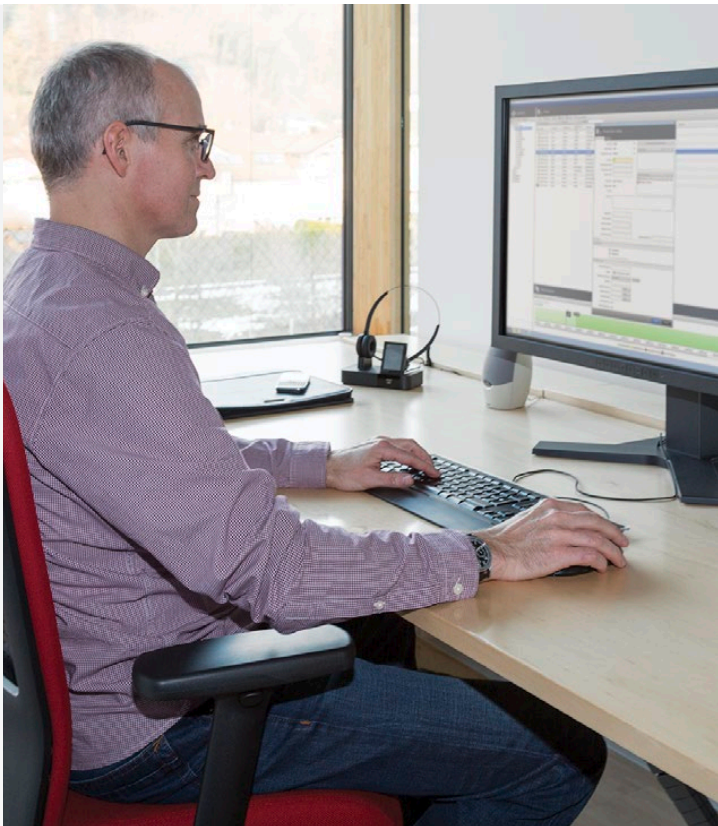
Ordering information

ADMO – Asset data & maintenance solution for protection systems.

Stand-alone edition	VESM2053

Client-server edition

The client-server edition is to be configured according to customer specific requirements. Please contact your local sales representative to get a quote.



OMICRON is an international company serving the electrical power industry with innovative testing and diagnostic solutions. The application of OMICRON products allows users to assess the condition of the primary and secondary equipment on their systems with complete confidence. Services offered in the area of consulting, commissioning, testing, diagnosis and training make the product range complete.

Customers in more than 140 countries rely on the company's ability to supply leading-edge technology of excellent quality. Service centers on all continents provide a broad base of knowledge and extraordinary customer support. All of this together with our strong network of sales partners is what has made our company a market leader in the electrical power industry.

For more information, additional literature, and detailed contact information of our worldwide offices please visit our website.

www.omicron.at | www.omicronusa.com