

EcoConsult Electrical Digital Twin





## The Digital world is emerging

Modern day power is demanding more from your systems.

In the Power Distribution industry, you are expected to deliver consistent site reliability whilst maintaining safe and efficient operations. In order to keep up, you need innovative solutions that can meet and exceed the demands of tomorrow. With our EcoConsult Electrical Digital Twin, we update and maintain your electrical single line diagram, so you have a strong foundation to lower site risks tomorrow and be ready for expansions in the future. In addition we leverage your new digital twin to perform Power System Studies to help improve further safety and efficiency.



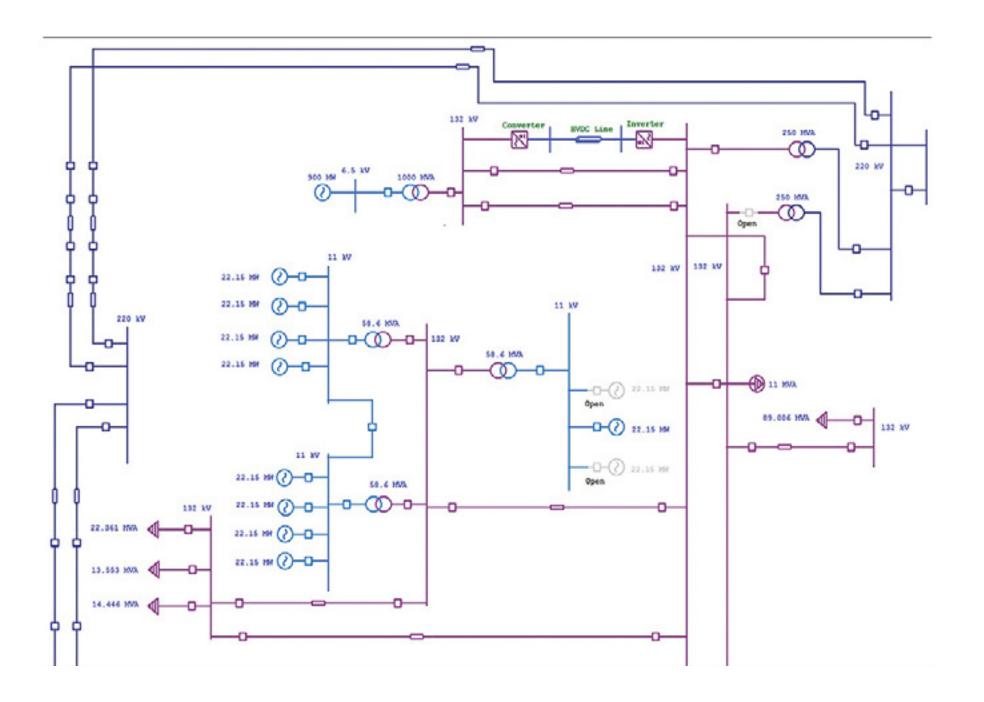
# What is an Electrical Single Line Diagram?

A single line diagram (SLD) is a dedicated drawing, unique to each electrical system that represents the connection between the electrical distribution assets.

It offers a comprehensive view to your engineers and allows you to create or optimize your response plan, enabling electrical personnel to understand the design of the facility's electrical distribution system.

Whether you are in control of a new or existing facility, a single line diagram acts as a roadmap for testing and maintenance activities.

In order to be effective, a SLD needs to be kept up-to-date with your electrical system so that your engineers can understand and act accordingly.



# Simplify your operations with EcoConsult Electrical Digital Twin

EcoConsult Electrical Digital Twin is our innovative SLD network energy-management solution.

Its streamlined approach aims to reduce time-consuming activities that are associated with your single line diagram management by converting it into a single, digital and evolutive document. Schneider Electric collect electrical asset data, build the digital SLD model and maintain it over the service plan duration.

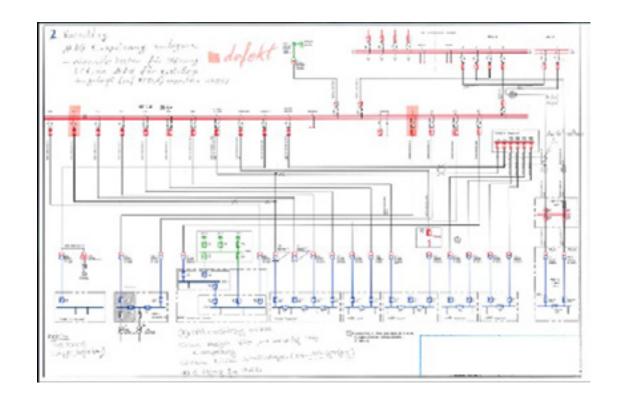
With this, we allow you to stay in control of your technical information, keeping up with today's safety challenges, to tomorrow's sustainability regulations, to the future needs of the distribution grid and beyond.

Your SLD can be shared throughout your company, providing everyone with the benefits of our EcoConsult Electrical Digital Twin Service along with Schneider Electric expertise.

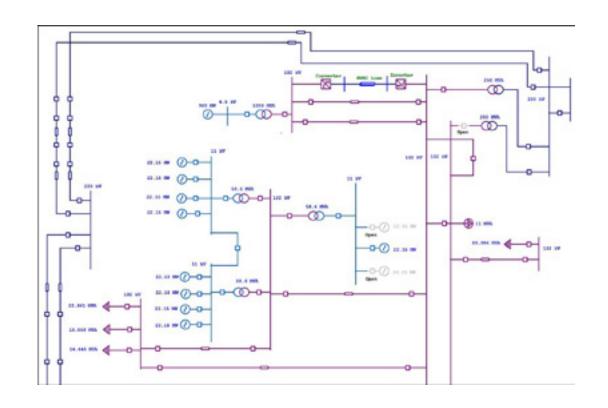


## Your EcoConsult Electrical Digital Twin journey

Digitize your SLD to to help gain in safety and efficiency, unlock advanced simulations, and be ready for sustainaibility and digitization challenges.



Convert your PDF...



## to an EcoConsult Electrical Digital Twin

- Schneider Electric collect data on site and digitize your SLD model in ETAP
- You can visualize your SLD with ETAP license
- Schneider Electric will maintain your model The ETAP tool is the world leading software used to visualize SLD information.



- Network Model Visualization
- Network Model Analysis
- to enable advanced, innovative features.
  - Deliver advanced system studies such as Arc flash, protection coordination, and short circuits
  - Empower your staff
  - Enhance your Electrical Monitoring and Control System to improve operational efficiency

## Improve safety, efficiency, and operations

An accurate electrical single line diagram helps ensure personnel safety, equipment longevity, and plant reliability.

- Meet compliance with applicable regulations and standards
- Avoid expensive modeling costs and timeconsuming data collect for every studies and audits
- Allow personnel who respond to an event to identify the affected equipment quickly
- Predictive simulation that can be used to testrun future power demand, so your systems stay ahead

## Improve Operational Reliability

Leverage EcoConsult Electrical Digital Twin to run Power System studies

## Enhance Plant Expansion

Employ EcoConsult
Electrical Digital Twin
to run optimization and
feasibility technical
studies

### Optimize and Secure Operations and Maintenance

Connect with EcoConsult Electrical Digital Twin to real time information

# Accelerate your digitization journey and help leverage innovative safety and sustainability

Without an up to date SLD, businesses run the risk of increased human error, such as shutting off the wrong part of an electrical system, which in turn can lead to unwanted downtime.

With less site visibility, operators may begin working on live pieces of equipment. In worst case scenarios, this can lead to injury, or even fatality.

#### Help improve site safety and resiliency

With our EcoConsult Electrical Digital Twin you are provided with full visibility of your electrical system. Your operator can refer to the last update of the system architecture anytime, helping in operation, troubleshooting and planning.

#### Enhance sustainability to help match your Green targets

With increased pressure being placed on sustainability, site expansion is required more than ever. EcoConsult Electrical Digital Twin records network changes and keeps your network map up to date helping to simplify site expansion and improve sustainability.

#### Simplify your Site Management

EcoConsult Electrical Digital Twin allows us to manage your SLD for you, providing continuous updates of your technical documents.

Improved visibility and consistency allows you to manage multiple sites more efficiently.

### Improve reliability and efficiency

With EcoConsult Electrical Digital Twin you get access to Power System (short circuit, protection coordination, Arc flash) delivered by our Schneider Electric Consultants.

## One single source to optimize site visibility

With our EcoConsult Electrical Digital Twin you can keep your technical documentation healthy and optimized for the future.

#### Improve safety

An updated SLD is the most fundamental material for any facility, helping to protect your staff and inform engineers.

#### Reduce OPEX

Decrease your spending on data collection, downtime costs, and engineering.

### Digitize your system

Be ready for your digital transformation by identifying easier feeders to be digitally monitored.

## Help complying to local regulation

With just a few simple clicks you can access an updated network diagram 24/7, and to help you be compliant with local regulations

#### Optimize CAPEX

Modernizing your system helps to future-proof your business and improve your capital.

## Improve efficiency and embrace real time features

With Power System Analysis, you can improve the efficiency of your installation. With real time features, you can empower your staff and future-proofing your operations.



To learn more about the EcoConsult Electrical Digital Twin offer, contact your local Schneider Electric service sales representative.













#### Schneider Electric

35 rue Joseph Monier 92500 Rueil-Malmaison, France

Tel: +33 (0)1 41 29 70 00

© 2023 Schneider Electric. All Rights Reserved. Life Is On | Schneider Electric and EcoStruxure are trademarks and the property of Schneider Electric SE, its subsidiaries and affiliated companies. 998-xxxx