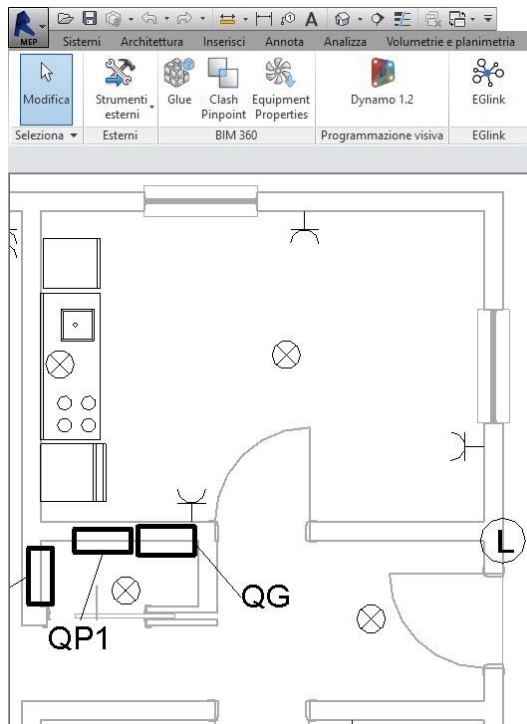


Interoperability Revit© - Ampère Professional

EGlink is an interchange plug-in between **Autodesk Revit** and **Ampère Professional** and represents the Electro Graphics's response to **BIM** (Building Information Modeling) process mode. The basis of **BIM** philosophy is sharing information to ensure easy communication and cooperation between the various professional figures involved in the project and the construction of a building throughout the lifecycle of a work.

EGlink born with the aim to take advantage of the potential of Electro Graphics calculation software and transfer the results to a BIM design environment according to a data interchange logic where the electric units and the links among them are bound by the network defined in the Revit project.



In a simple and automatic way, **EGlink** allows you to:

- Extract the power circuit network (distribution and terminal elements) from the Revit project reading the main electrical data exposed by the elements.
- Generate the related Ampère project, with a one-to-one correspondence between Revit elements and equivalent Ampère units.
- Take advantage of the potential of Ampère Professional and transfer the results of the calculation of the electrical grid into the Electro Graphics parameters displayed in the Revit elements.
- Synchronize the electrical data of the Ampère units related to Revit elements in a bidirectional way.

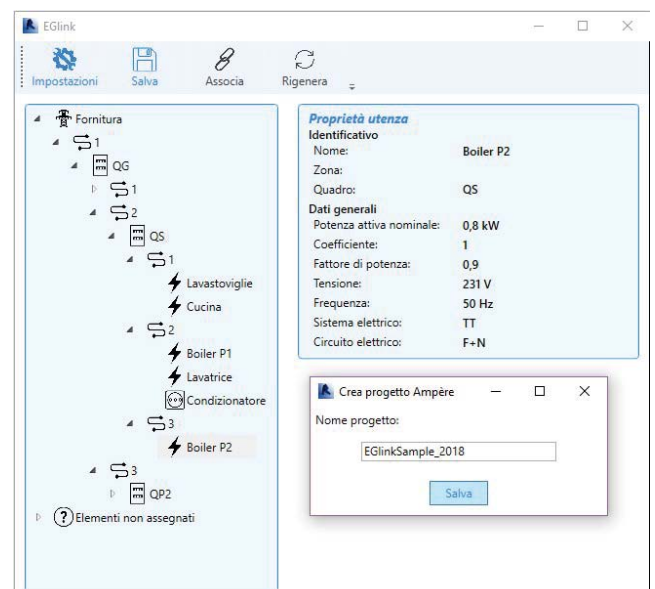
EGlink obtains all the electrical information made available by Revit families that model distribution elements (panels, transformers, etc.) and terminal elements (sockets, lights, electrical equipment, etc.) starting from an electrical system, designed in Revit.

Following the logic of definition of power electric circuits in Revit, **EGlink**:

- scans the grid circuits;
- reconstructs the links between the different elements involved;
- retrieves the list of elements not assigned, or not belonging to any electrical circuit.

The electrical data obtained from each element represent the starting information for the definition and meshing of the units of the related Ampère project.

Each electrical data is linked to an Electro Graphics design

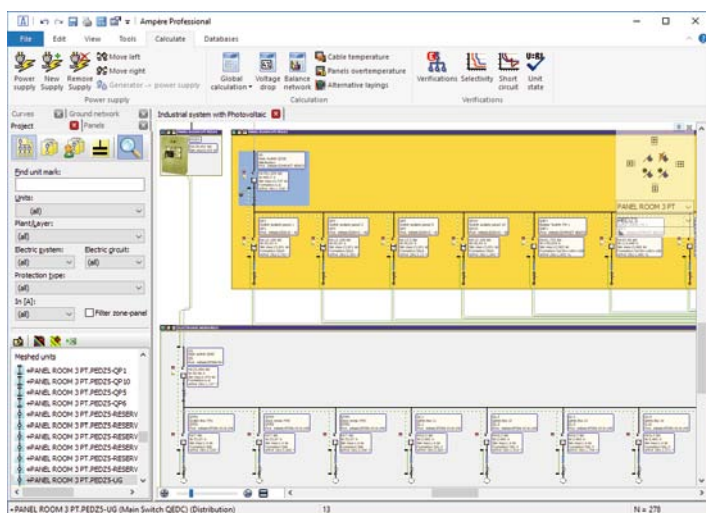
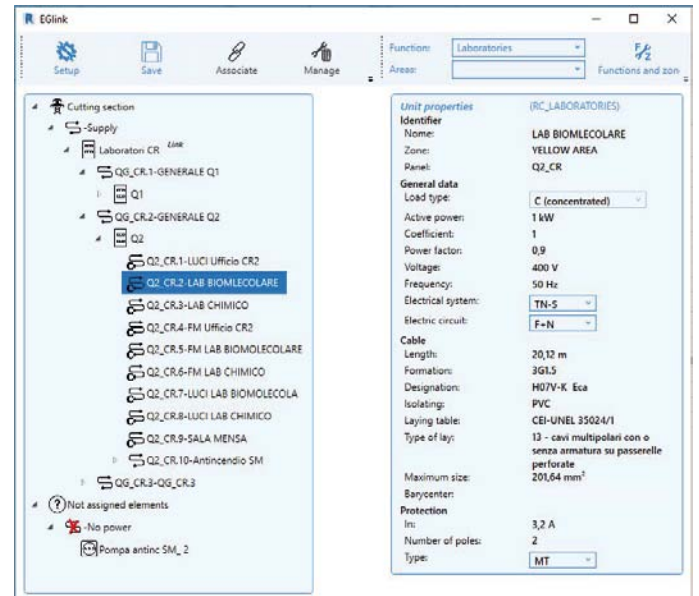


parameter, which can be viewed in the Revit Properties palette; these parameters are the basis of the automatic data synchronization mechanism between the two related projects, offered by ELink, which guarantees bidirectional updating between Revit electrical data and Ampère electric data.

Ampère related project generation

ELink generates the Ampère project related to the current Revit project. Each electric element drawn in Revit corresponds to an equivalent Ampère unit.

The meshing and the definition of the panels of the related Ampère project is obtained starting from the electrical connections defined between the elements of the Revit project, displayed in the system browser and rebuilt in the ELink interface.



Grid calculation in Ampère Professional and data synchronization

In Ampère Professional you can take advantage of the potential offered by the software: editing the electrical data of the users, assigning protections, calculating the electrical grid.

Once all the necessary processing has been performed, the results obtained can be transferred automatically to Revit.

The synchronization of electrical data managed by ELink is bi-directional, ie you can make changes to the Revit elements by editing the Electro Graphics parameters directly in the Properties palette of ELink; the related Ampère unit data will be automatically updated.

Edit units links in Revit

After the creation of the related Ampère project you may need to change the links between users in Revit: add new elements, create new circuits and / or modify existing

circuits, delete elements and / or circuits.

The related Ampère project is updated automatically: the new elements are associated with new Ampère units and possibly meshed, while the units related to the deleted elements are unmeshed.

You can also make changes to the mesh in Ampère and automatically synchronize the Revit project with the possibility of associating the new units with Revit elements not yet related to Ampère project entities.

Display of calculated electrical cables data

At the end of the system design, you can trace the power circuits in Revit (taking advantage of the symbolic representation offered by the software), then, using ELink, obtain the designation and cable formation calculated in Ampère and display them in the Revit project using customized cable annotations Electro Graphics.

