

ETAP FAQ # 5

Insert Legends, Text, and Tables Into One-Line Diagrams Using OLE and ActiveX Objects

Description: Legends, text, tables, logos, and calendars can be inserted directly into a one-line diagram using OLE and ActiveX objects.

Version: ETAP 4.0.4

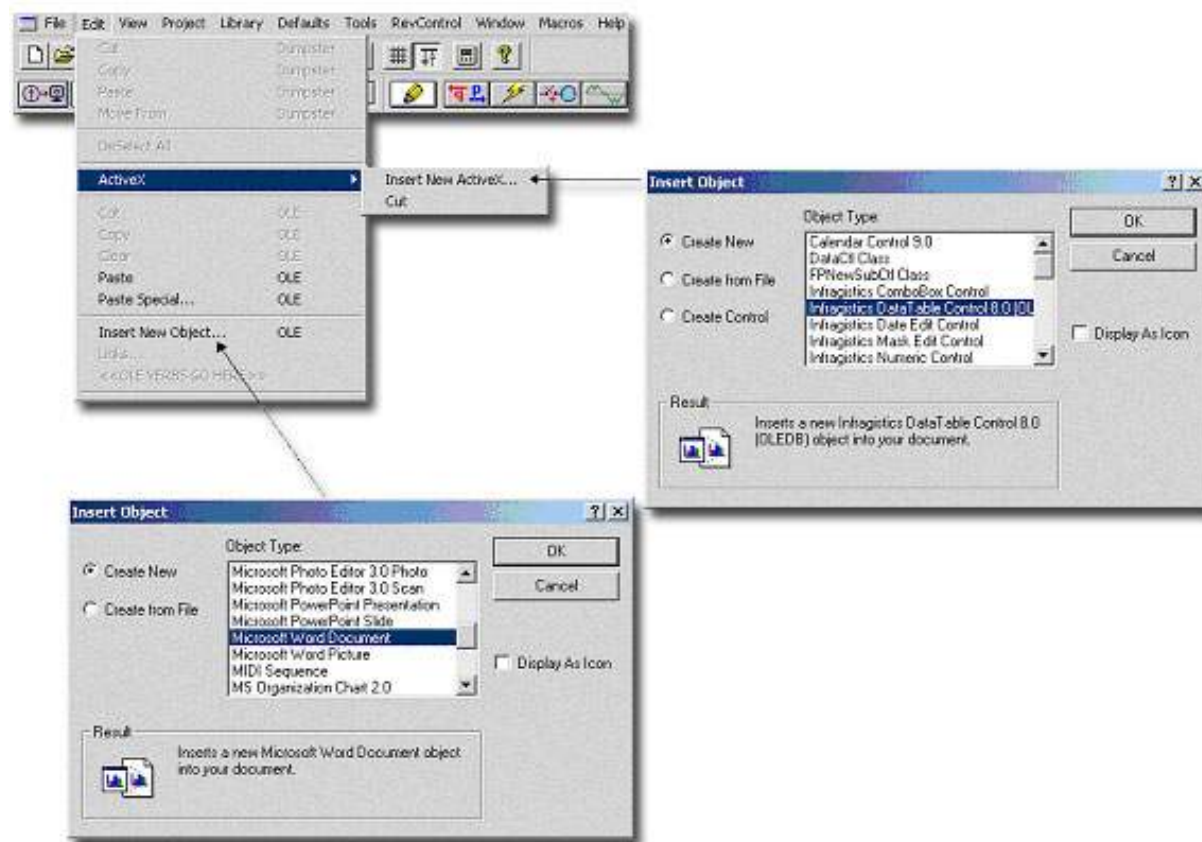
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Objective:
It is highly desirable to modify your one-line diagram to include a wide variety of objects to customize the user's individual project.

Solution:
ETAP's OLE objects function is a versatile tool for achieving a one-line diagram that meets the user's appearance. You can insert any object registered on your computer as an editable text or an icon. If you decide to insert the icon instead of editable text to minimize the confusion while working on your one-line diagram, it is possible to do so by clicking the right mouse key over the OLE object.

ETAP's ActiveX object is a useful tool for assisting in the accuracy of your ETAP one-line diagram. Inserting a calendar as an ActiveX object can make sure the ETAP one-line diagram date is equivalent to the date of your approved full size diagrams.

Below is the illustrated path you can follow for inserting an OLE or ActiveX object.



The OLE object can be dynamically linked to the ETAP database. The OLE object will continually be updated if there are changes to the one-line diagram. To edit the object, double-click on the object and it will bring you to the program the object is from. Below is a list of some of the most common programs you can use for OLE objects:

1. Legend: Microsoft Word, Microsoft Excel, Microsoft PowerPoint
2. Tables: Microsoft Excel, Microsoft PowerPoint
3. Text: Microsoft Word, WordPad, Notepad

The following one-line diagram includes a variety of different OLE objects.

Logo using Bitmap Images

Cable Schedule using Microsoft Excel document

| Cable ID | Size | Length | #/ph | R | X |
|----------|------|-----------|------|---------|---------|
| Cable1 | 440 | 0.000 ft | 1 | 0.0436 | 0.04660 |
| Cable10 | 240 | 567.00 ft | 1 | 0.0300 | 0.04320 |
| Cable11 | 440 | 259.00 ft | 1 | 0.06400 | 0.03690 |
| Cable12 | 1 | 55.000 ft | 1 | 0.06000 | 0.05700 |
| Cable13 | 350 | 67.000 ft | 1 | 0.03500 | 0.05000 |
| Cable14 | 250 | 900.00 ft | 2 | 0.05520 | 0.03750 |

Legend Microsoft Word document

| Item | Code | Desc | Unit |
|-------|--------------------|------|------|
| Item1 | E001-SUB25-0000315 | POP | EA |
| Item2 | E001-SUB25-0000315 | POP | EA |
| Item3 | E001-SUB25-0000315 | POP | EA |
| Item4 | E001-SUB25-0000315 | POP | EA |
| Item5 | E001-SUB25-0000315 | POP | EA |

One-Line Diagram
Substation 25
User 182
Operation Technology, Inc.
Lake Forest, CA
E001-SUB25-0000315

The following one-line diagram includes an ActiveX object.

ActiveX object using Calendar Control

Utility 1500 MVA_{sc}

34.5 kV Main Bus

-2.5% TapP

T2 10 MVA

Gen1 7.5 MU

T1 15/10/5 MVA

Sub 3

Grid2

4.16 kV

T4 1.5 MVA

July 2002

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|-----|-----|-----|-----|-----|
| 30 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |

The commands to manipulate OLE objects and ActiveX objects onto a one-line diagram can be found in Section 5.2.2 of the ETAP 4.0 User Guide.

Operation Technology, Inc.

