General Specifications

Model VP6E5216
Bulk Editing Package
(for Module-based Engineering)

GS 33J10D26-01EN

[Release 6]

- GENERAL

The Bulk Editing Package (for Module-based Engineering) is one of the optional packages of Automation Design Suite (AD Suite) to be used with the VP6E5210 Module-based Engineering Package. For details of the AD Suite, and Module-based Engineering, refer to the General Specifications “Automation Design Suite (AD Suite) VP6E5000 Engineering Server Function, VP6E5100 Standard Engineering Function” (GS 33J10D10-01EN), and “VP6E5210 Module-based Engineering Package” (GS 33J10D22-01EN) respectively.

This package enables to collectively edit setting items such as multiple function blocks and alarm attributes which were designed when creating control applications without launching an editor by individual application module. Mass Editor is to edit those parameters collectively and Grid Rule supports collective editing.

The Mass Editor is a table format editor for collectively editing each application module (*1) without launching the control logic editor or the alarm attribute editor individually.

The Grid Rule is a supportive function for defined parameter values to collectively edit or check those consistencies. These collective editing functions increase efficiency of engineering work.

*1: An application module is a component to configure actual control applications created based on a class module. For details, refer to General Specifications of “VP6E5210 Module-based Engineering Package” (GS 33J10D22-01EN).

This package is applicable to the FCS created by using VP6E5210 Module-based Engineering Package. Applicable FCS models are: AFV30S, AFV30D, AFV40S, AFV40D, A2FV50S, A2FV50D, A2FV70S, and A2FV70D

- FUNCTION SPECIFICATIONS

The Bulk Editing Package realizes the following functions using Automation Design Organizer (AD Organizer).

- Collective editing by the Mass Editor
- Collective editing and consistency checking of setting parameters by the Grid Rule

- Bulk editing by Mass Editor

The Mass Editor is a table format editor for collectively editing setting parameters such as control logics and alarm attributes of multiple application modules designed when creating a control application without launching the control logic editor or the alarm attribute editor by the individual application module. The Mass Editor has sorting and filtering functions to enable efficient editing of setting parameters.

The Mass Editor consists of two editors: one is Control Logic Mass Editor and the other is Alarm Attribute Mass Editor. Both editors can be launched respectively from the AD Organizer.

<table>
<thead>
<tr>
<th>Types of Mass Editor</th>
<th>Parameters to be edited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Logic Mass Editor</td>
<td>Parameters in function blocks (*1)</td>
</tr>
<tr>
<td>Alarm Attribute Mass Editor</td>
<td>Alarm attributes</td>
</tr>
</tbody>
</table>

*1: Parameters to be handled vary by functional blocks.

Setting parameters edited by the Mass Editor are saved to Automation Design Server (AD Server) as user common engineering data.
Bulk editing and consistency check of parameters by Grid Rule

The Grid Rule is a supportive function for defined parameters for application modules such as defined tag names or functional block detailed definitions to collectively edit parameters or check consistencies if those parameter values meet the set conditions.

The Grid Rule has two types: one is Edit Rule and the other is Check Rule. The Edit Rule collectively edits parameter values and the Check Rule judges consistencies of the parameter values by defining the applicable conditions and actions.

<table>
<thead>
<tr>
<th>Name</th>
<th>Descriptions of editors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass Editor</td>
<td>Control Logic Mass Editor</td>
</tr>
<tr>
<td></td>
<td>Alarm Attribute Mass Editor</td>
</tr>
<tr>
<td>I/O Editor</td>
<td>Process I/O Editor</td>
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<tr>
<td></td>
<td>Communication I/O Editor</td>
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<tr>
<td>Switch Editor</td>
<td>Common Switch Editor</td>
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<td>Global Switch Editor</td>
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<td>Message Editor</td>
<td>Annunciator Editor</td>
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<td></td>
<td>Signal Event Editor</td>
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<td></td>
<td>Operator Guide Editor</td>
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<tr>
<td></td>
<td>Print Message Editor</td>
</tr>
<tr>
<td>Other</td>
<td>Instance List Window</td>
</tr>
</tbody>
</table>

Definitions of applicable Conditions

Applicable conditions can be defined to narrow down parameters to perform bulk editing or consistency check.

The conditions such as shown below can be set for application module setting items:

- If a string or numeric value matches the setting parameter value;
- If a string includes the setting parameter value;
- If a numeric value is larger or smaller than the setting parameter value.

Multiple applicable conditions can be applied using AND, OR, or with priority. For example, the Grid Rule can define the following applicable conditions by defining - Function block type is PVI and the tag name includes PVI for all the function blocks of the specified application module.

Definition of Edit Rule Actions

In order to activate the Edit Rule, select the items of application module setting and define the contents to collectively edit the application module parameters. For the specified application module setting items, numeric or string parameter value setting can be collectively edited. The bulk editing functions can also be used by the types of parameter values.

For string type parameter value: Extract strings which contain specified digits of characters from the specified position; convert strings to upper or lower case; or identify strings to replace by the pre- or post-replacement strings and then replace them as desired.

For numeric type parameter value: Calculate square root.

Multiple definitions of the Edit Rule Actions can be connected. For strings, multiple strings of the edit rule actions can be connected, or for numeric, computation of multiple numeric values can be performed.

For example, an action as shown below can be defined by the Edit Rule Actions of the Grid Rule.

A sample of a Edit Rule Actions: If tag comments contain characters “ABC” for all the functional blocks of the selected application modules, “ABC” can be collectively replaced with “XYZ.”

Definition of Check Rule Actions

The Check Rule Actions is to define conditions for consistency check for selected application module setting items.

Conditions as shown below can be defined for the application module setting parameters to be checked.

- If strings or numeric values match with the setting parameter values
- If a string contains the setting parameter values
- If a numeric value is larger or smaller than the setting parameter values

Multiple definitions of a check rule actions can be created and applied using AND, OR, or with priority.

For example, the following check rule actions can be defined by the Grid Rule: check if the functional restriction level is 3 or not for all the functional blocks of the specified application module.

Execution of the Grid Rule

The defined grid rule is executed by the applicable editor of the Grid Rule. The items being edited in the Edit Rule are displayed in a color that indicates correction in progress. The items that cannot meet the conditions by the Check Rule are displayed in a color that indicates warning status. The Grid Rule execution result can also be undone.

The Grid rules are saved to the AD Server as user common engineering data.
**OPERATING ENVIRONMENT**

- **Hardware Requirement**
  Conforms to the operating environment of VP6E5100 Standard Engineering Function.

- **Software Requirements**
  Conforms to the operating environment of VP6E5100 Standard Engineering Function.
  
  **Required Software:**
  - VP6E5100 Standard Engineering Function
  - VP6E5210 Module-based Engineering Package

**MODELS AND SUFFIX CODES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>VP6E5216</td>
<td>Bulk Editing Package (for Module-based Engineering)</td>
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<table>
<thead>
<tr>
<th>Suffix Codes</th>
<th>Description</th>
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<tbody>
<tr>
<td>-V</td>
<td>Software license</td>
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<td>Always 1</td>
</tr>
<tr>
<td>1</td>
<td>English version</td>
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</table>

**ORDERING INFORMATION**

For CENTUM VP R6.04 and later, this package is bundled together with the Automation Design Suite Standard Engineering Function (VP6E51AD) and may not be ordered separately (see GS 33J10D21-01EN for details).

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