Four Methods for Planning Data Validation in BPC70NW

Applies to:

SAP BPC 7.0 NW.

For more information, visit the Enterprise Performance Management homepage.

Summary

This whitepaper reviews four optional methods to validate planning data entries (budgeting, forecasting) in BPC. Those methods can be used together, or separately to ensure that data is submitted within the organization's guidelines and parameters for the planning process.

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Author Bio

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Product specialization: SAP BPC (5.1MS;7.0NW) and Business Objects Planning

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Introduction

Planning data (budgeting, forecasting) is often unique in that it is newly created by the planning users. As a result, planning systems often need to be more open and apply fewer restrictions on users' selection of data parameters. However, many planning scenarios require limiting users' data submissions within specific parameters and guidelines. The parameters and guidelines may apply to the data itself (ranges, limits, tolerances) or the dimensional values (members) it is posted to.

This whitepaper focuses on the second validation aspect, and offers four optional methods for implementing validation rules to ensure that data is posted to the correct dimensional values. The methods include front and back end options, and can be used together, or separately to arrive at the desired user interface functionality in BPC 7.0 NW.
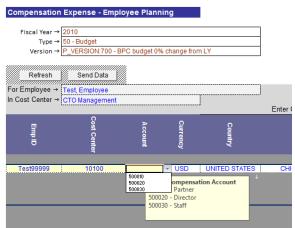
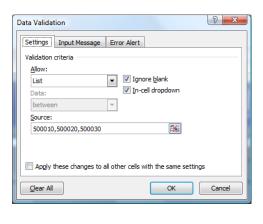## Data Validation Methods

Front-End Methods

Native Excel Data Validation

BPC's planning interface is typically built in Excel within the BPC Excel module. Since input schedules are essentially enhanced Excel worksheets, the use of Excel's native Data Validation feature to control user entries and selections is conventional. It is also efficient as the user receives system feedback instantly, even before the write-back procedure is invoked.

Multiple options are available. One common use is creating in-cell dropdown lists for the valid values to enter\select. Excel data validation will also support adding a pop-up message regarding the input cell contents and limits. A validation rule can also depend on a different cell value[1].

Example:

In this example the user see an in-cell dropdown list with only three GL accounts to select.
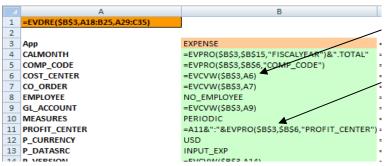
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[1] See MS Excel help for complete data validation information - reference 1

Validation Rules Using Custom BPC Functions

Native Excel can be used in combination with custom BPC functions such as EvPRO and EvCVW to create more complex validation rules. BPC allows for embedding custom BPC functions within Excel formulas, therefore expanding the options to support a wider range of validation logic.

Consider the following validation scenario where a custom BPC function is used to preserve a certain predetermined inter-dimensional relationships:

- A planning user is only allowed to post data to members in dimension A (profit center in the example below), that have specific predetermined relationships (N-1 in the example below) with member in dimension B (cost center in the example below)
- A property in dimension B stores dimension A values that should be associated with dimension B selected member, therefore reflecting the required predefined relationships
- An EvPRO function can be used to retrieve dimension A value based on dimension B selection, ensuring that data is being posted along the required parameters

Dimension B (Cost Center) is a user selection on the action pane (retrieved using EvCVW)

Dimension A (Profit Center) is derived by dimension B selection using EvPRO

Back-End Methods

Validation Using New BackEnd Feature in BPC7.0NW

Validations is a new feature introduced in BPC70NW. Validation configuration is performed in transaction code UJ_VALIDATION in BW. This feature is configured around the concept of a driver dimension, where rules are applied to all records being saved[2].

Consider the following validation scenario where accruals information should only be posted during the forecasting cycle:

- Account will be the driver dimension, and the accruals accounts will be the assigned members
- The validation rule will flag the category dimension member 'forecast' (the category dimension will typically include 'budget', 'forecast' and 'actual' members) as allowing posting records to the accruals GL account.
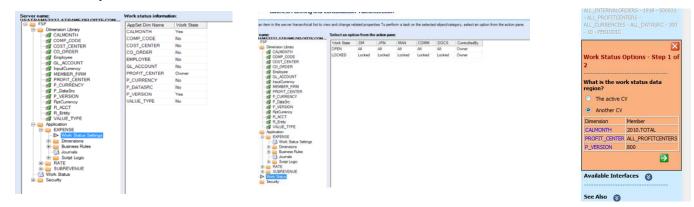- This way, no budget or actual data can be posted to the accruals accounts

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[2] Please refer to the How To guide on Validation setup in BPC 7NW for detailed configuration steps. See reference 2

BPC Work Status

Work status provides the ability to lock data regions in an application (cube) based. A region of data is defined by three to five dimensions. The lock prevents the end user from changing data in the locked region.[3]

Work Status is yet another feature that can be used as a data validation method.

Consider a scenario where multiple budget versions are created during the budgeting cycle but only one is declared final. While the users want to continue working on additional budget scenarios (posted as new budget versions), the current final version must be locked for changes:

- A Version dimension (user defined) will be defined as a lock dimension for an application
- Once a budget version is declared final Work Status is used to lock that version to changes
- This way, no budget data posted to the locked version can be further modified

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[3] Please refer to the How To guide on Work Status setup in BPC 7NW for detailed configuration steps. See reference 3

Conclusion

BPC 7.0 on NetWeaver platform provides multiple tools to support validation functionality as it relates to user selections and entries. These tools can be used separately or in combination to prevent posting incorrect records to the database, implement planning policies, reduce entry errors and increase users' confidence in the data.

Considerations for which methods to use should include the required functionality, system administration and maintenance aspects.

The methods described in this paper are relatively easy to configure by a functional consultant and do not required custom coding. The expected outcome is eliminating data errors and incorrect postings therefore increasing the value BPC brings to the planning users, and the organization overall.

Related Content

[Reference 1 - Excel data validation samples from Microsoft](#)

[Reference 2 – UJ_Validation](#)

[Reference 3 – Work Status](#)

For more information, visit the [Enterprise Performance Management homepage](#).

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