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Characteristic Based Planning with mySAP SCM™

Scenarios, Processes,
and Functions

With contributions by
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With 174 Figures
and 3 Tables

 Springer

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Preface

Characteristics are used in SAP as attributes, e.g. to specify the configuration of products or the properties of batches. In many industries – engineering, automotive, mill, pharmaceutical and foods to name the most typical – supply chain planning has to consider these characteristics. APO offers many different functionalities for planning with characteristics, where each of the functionalities has some prerequisites and incompatibilities. Within the design of an implementation there are multiple determinants for the system configuration, and it is very important to understand the interdependencies and limitations at an early stage of the project. This book offers help and advice for the basic design of the implementation by explaining

- the processes and scenarios (process chains) for planning with characteristics,
- the functionalities for planning with characteristics in APO including their prerequisites and incompatibilities and
- the entities, dependencies and system configuration determinants for planning with characteristics in R/3 and APO

in order to avoid the discovery towards the end of the implementation that some parts just do not work together – and this risk is much higher using characteristics because the interdependencies are much less obvious.

We believe that especially with characteristic based planning (a newly introduced term to subsume the different functionalities for planning with characteristics) it is very important to understand the order flow in detail. Therefore we will focus whenever possible on the scenario and use a functionality oriented approach only for those functions which require an extensive explanation or are used in multiple scenarios.

The focus on the selected scenarios does not imply that these are the only possible ones. But with the understanding of these scenarios and the limitation of the functionalities it will be a lot easier to assess whether a specific design is somewhere near the trodden path or not and which incompatibilities might arise.

For the visualisation of the order flow we are using comparatively many screenshots because the appearance of the objects is different depending

on the configuration, and for the practical implementation it is helpful to notice the difference whether the characteristics values of an order in APO are due to variant configuration, descriptive characteristics or batch selection.

This book is clearly not an introduction to R/3 and APO in general. Therefore we assume a fairly good understanding about the basic concepts of these systems – in particular SD on R/3-side and DP, PP/DS and ATP on APO-side. Even without a detailed understanding of all of these modules it is possible to understand the basic messages of the book, but for implementation help other sources have to be found – e.g. Dickersbach 2004. References to the literature have been kept to a minimum, instead OSS notes are referenced. Since the focus of this book lies on the application of the APO and R/3 system and the processes and scenarios which can be modelled with these (and less on general advantages and disadvantages of certain processes), this seemed to me the more helpful way.

This document is based on the releases SCM 4.1 and R/3 4.7. For earlier releases additional constraints apply.

First of all I would like to thank Anton Forstreuter, Christian Fuhlbrügge and Thomas John for their extensive help – from the multiple hints about the correct configuration of the system up to the discussions about the ideas and purposes of the functions, processes and scenarios. Without their contribution this book would not have been possible. Many thanks as well to Stefan Elfner and Dr. Sven Eigemann for their help in the area of the batch selection and to Christoph Jerger, Veronika Schmid-Lutz and Dr. Frank Horlacher for their comments and corrections. Finally I would like to thank Tobias Götz for his generous support of this project.

Jörg Thomas Dickersbach

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