

# Oracle® FLEXCUBE Investor Servicing Development Workbench Performance Tuning Enhancements



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# Preface

**Oracle FLEXCUBE Investor Servicing** is a comprehensive mutual funds automation software from Oracle® Financial Servicing Software Ltd.©.

You can use the system to achieve optimum automation of all your mutual fund investor servicing processes, as it provides guidelines for specific tasks, descriptions of various features and processes, and general information.

This topic contains the following sub-topics:

- [Purpose](#)
- [Audience](#)
- [Documentation Accessibility](#)
- [Critical Patches](#)
- [Diversity and Inclusion](#)
- [Conventions](#)
- [Screenshot Disclaimer](#)
- [Prerequisite](#)
- [Related Resources](#)

## Purpose

This manual is designed to help FLEXCUBE Application developers/users to familiarize with ORACLE FLEXCUBE Development Workbench for Investor Servicing.

## Audience

This document is intended for FLEXCUBE Application developers/users that use Development Workbench to develop various FLEXCUBE components.

To Use this manual, you need conceptual and working knowledge of the below:

**Table 1 Proficiency and Resources**

Proficiency	Resources
<b>FLEXCUBE Functional Architecture</b>	Training programs from Oracle Financial Software Services.
<b>FLEXCUBE Technical Architecture</b>	Training programs from Oracle Financial Software Services.
<b>FLEXCUBE Object Naming Conventions</b>	Development Overview Guide

**Table 1 (Cont.) Proficiency and Resources**

Proficiency	Resources
Working knowledge of Web based Applications	Self-Acquired
Working knowledge of Oracle Database	Oracle Documentations
Working knowledge of PLSQL developer	Respective vendor documents
Working knowledge of PLSQL and SQL Language	Self-Acquired
Working knowledge of XML files	Self-Acquired

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

### Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at [Critical Patches](#), [Security Alerts and Bulletins](#). All critical patches should be applied in a timely manner to ensure effective security, as strongly recommended by [Oracle Software Security Assurance](#).

## Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

## Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes.

## Prerequisite

Specify **User ID** and **Password**, and log in to **Home Screen**.

## Related Resources

The functions of ORACLE FLEXCUBE Development Workbench for Investor Servicing system is organized into various guides, each discussing a component.

For more information, see these Open Development Tool documents:

- *Open Development Tool Installation*
- *Development Workbench - Getting Started*
- *Development Workbench - Administration*
- *Development Workbench - Screen Development I*
- *Development Workbench - Screen Development II*
- *Development Workbench - Screen Customizer*
- *Development Workbench - Notifications*
- *Development Workbench - Bulk Generation*
- *Development Workbench - Source Upgrade*
- *Development Workbench - Tracking Changes*
- *Child and Screen Childs - Concept and Design*
- *Development of Maintenance Form*
- *Development of Online Form*
- *Development of Call Form*
- *Development of Launch Forms and Other Screens*
- *Development of Dashboard Form*
- *Development Workbench Service XML Development*
- *Development Workbench Performance Tuning Enhancements*
- *Development Workbench - Rest Services Development*

# 1

## Definition/Modification of LOVs

This topic describes the process for the Definition/Modification of LOVs for handling high volume data using the Oracle FLEXCUBE Development Workbench for Universal Banking.

- [List of Values](#)  
This topic provides an overview of the List of Values.
- [Summary Query performance Enhancements](#)  
This topic provides an overview of summary query performance enhancements for handling the high volume data.

### 1.1 List of Values

This topic provides an overview of the List of Values.

Oracle FLEXCUBE Development Workbench provides the developer with a user-friendly console for defining LOV's of FCUBS handling the high volume data with the following parameters. The following are the parameters/features for handling such LOVs:

- **Exact Fetch**
- **Is Mandatory**
- **Minimum number of Search Character**

#### Exact Fetch

In the **Block Field Properties** screen, if the field **Display Type** is of **LOV**, then the developer can select the **Exact Fetch** parameter for search optimization (in High Volume).

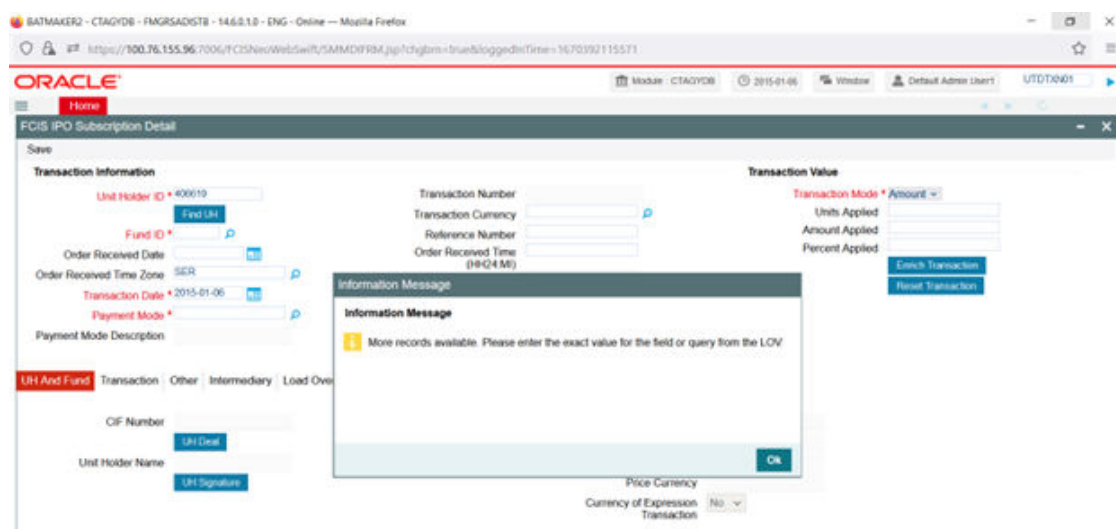
**Figure 1-1 Block Field Properties\_Exact Fetch**

The screenshot shows the 'Block Field Properties' window in the Oracle FLEXCUBE Development Workbench. The 'Field Name' is 'FUNDID', 'Field Label' is 'LBL\_FUNDID', and 'Data Source' is 'CONSOLIDATEDXTNBL'. The 'Display Type' is set to 'Lov'. The 'LOV Name' is 'LOV\_FUND', which is highlighted with a red box. The 'Off Line LOV Name' is 'FST\_TRANSACTION\_INFO'. The 'Exact Fetch' checkbox is checked, also highlighted with a red box. Other checkboxes like 'Required', 'Is Edit', 'Read Only', 'Calendar Text', 'Pop-up Edit Required', 'Uppercase Only', 'LOV Validation Required', 'Input by LOV Only', 'Not Required in Xsd', 'Report Parameter', 'Format Required', 'Hot Key Required', 'Focus Required', and 'Joint Holder Hot Key Required' are also visible. The 'XSD Tag' is 'FUNDID' and 'Comment ID' is 'CMT\_FUND\_ID'. The 'Field Size' is 6, 'Maximum Length' is 6, and 'Minimum Value' is empty. The 'Maximum Value' is empty, 'Maximum Decimals' is empty, 'TextArea Rows' is empty, 'TextArea Columns' is empty, 'Default Value' is empty, 'Preview Value' is empty, and 'Mask Id' is empty. The 'Attribute Name', 'Attribute Value', 'Active', 'Move Up', and 'Move Down' buttons are at the bottom.

If the **Exact Fetch** parameter is selected, the user has to provide the exact values of the field as it is present in the Database; otherwise, the system will throw the error message as an invalid value. Wildcard Searches are not permitted.

**For Example:** Entering 98712 in the **Account Number** field will fetch value only if an account with that particular number exists. In the Normal case, all account numbers beginning with the search pattern would be retrieved.

**Figure 1-2 Information Message on Exact Fetch**



### Is Mandatory

This parameter should be specified during the definition of LOV in ODT. If this parameter is selected, then total wild card search (by providing blank or % in reduction fields) won't be allowed on fields where the particular LOV is attached.

In the LOV definition screen, **Is Mandatory** option would be enabled for all Reduction Fields. This feature is not available for Global LOVs.

### Minimum Search Character Length

If **Is Mandatory** is selected as **Yes** for any reduction field, ODT will ask for minimum search character length. By default, the value is 3.

If the fields **Is Mandatory** and **Minimum Number of Search Character** is given as **n**, then while searching, the user has to enter a minimum of **n** characters to search a particular value otherwise the system will show an error message.

Any value less than 3 (Default value) will not be accepted. ODT will show an alert message in case of any rule violation. This feature is not available for Global LOVs.

**Example:** Customer LOV should allow searches based on **Is Mandatory** and **Minimum Number of Search Character** fields only and total wildcard search should not be allowed.

The figure below illustrates **Is Mandatory** and **Minimum Number of Search Character** fields in ODT.



Figure 1-3 Is Mandatory and Minimum Number of Search Character

Query Columns	Data Type	Visible	Reduction Field	Reduction Field Type	Reduction/Column Label	Is Mandatory	Min No. of Se
CURRENCYCODE	VARCHAR2	Yes	Yes	TEXT	LBL_CURRENCYCODE	Yes	3
CURRENCYNAME	VARCHAR2	Yes	Yes	TEXT	LBL_CURRENCYNAME	Yes	3

## 1.2 Summary Query performance Enhancements

This topic provides an overview of summary query performance enhancements for handling the high volume data.

Oracle FLEXCUBE Development Workbench provides the developer with a user-friendly console for defining criteria-based search for handling the high volume data with the following parameters. The following parameters/features are introduced for performance enhancements:

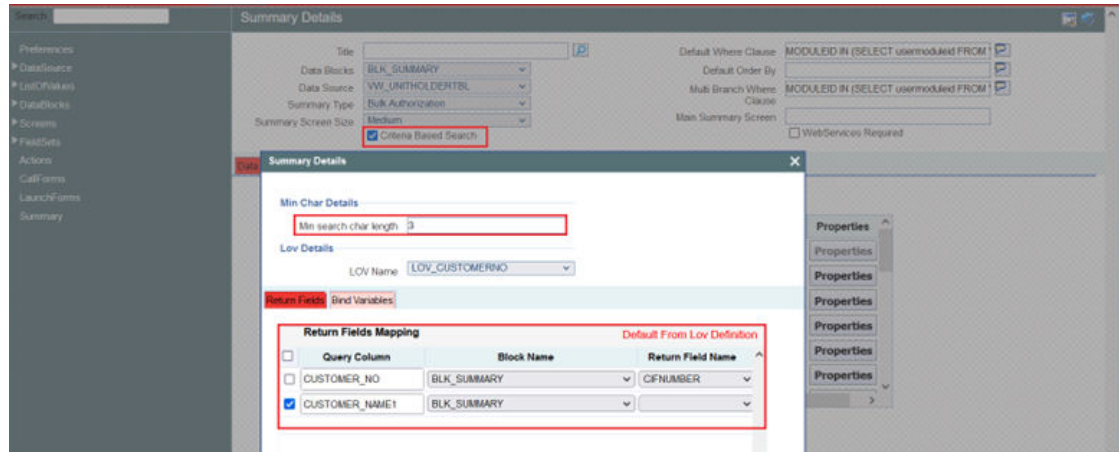
- **Criteria Based Search**
- **Minimum number of Search Characters**
- **Lov Details**

Figure 1-4 Summary Details Screen

### Criteria Based Search

**Criteria Based Search** is present in the **Summary** screen. If the user wants to enable a **Criteria Based Search** feature for the **Summary** screen, select the checkbox for a **Criteria Based Search**. Then on clicking the **Property** button, the user will have to provide the minimum search character length for that field.

**Figure 1-5 Criteria Based Search**



### Minimum Number of Search Characters

If the user wants to provide minimum search character length for the Lov for handling high volume data, the user has this option to provide a minimum number of characters required for the Lov to fetch the result of Lov.

If the user is not providing a minimum number of characters of the Lov while querying in the **Summary** screen, then the user will get an error message to provide minimum search character length.

There is a restriction to this field. If the user enters a value that is greater than the value of the field in the data source level, then ODT will not allow it, it will throw an error message.

### LoV Details

If a particular summary field needs to be attached to a Lov, then the user has to provide these details on click of the **Property** button. The user can map the corresponding return fields and the related bind variables.

Click **Default From Lov Definition**, then choose the required query columns, corresponding **Block Name** and the **Return Field Name**.