



# ESSBASE: BOOTCAMP

This five day course will enable developers and system administrators to create, manage and maintain Essbase applications using advanced techniques and best practice methods.

## Learning Objectives:

Students will learn about the design of Essbase Block Storage (BSO) and Aggregate Storage (ASO) databases and gain an understanding of Essbase multidimensionality. The course will also cover the loading and manipulation of data through calculation scripts as well as how to maintain and optimise Essbase databases.

## Course Description:

This comprehensive course covers key design principles and maintenance of BSO and ASO databases requiring no prior knowledge.

Essbase multidimensionality is explored covering dense and sparse settings, building an outline, maintaining the Essbase environment, creation and calculation of data blocks, storage types, the order of operations, member formulas, two-pass calcs and sparse rollups.

Learn how to set appropriate properties to maximise the efficiency of the database, this will include looking at caches, data compression and removing fragmentation.

Students will create and use MaxL scripts to automate tasks for loading and calculating data. The different calculation script types that are required for ASO or BSO databases will also be explored.

There are a multitude of reporting options available with Essbase, during the course particular emphasis is given to building Smart View queries in Microsoft Excel and Financial Reports.

## Course Information:

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|--------------------------|---|
| Audience:                | Essbase Developers and Hyperion Planning Administrators |
| Pre-requisites:          | None  |
| Delivery Method:         | Classroom (Group-Live)                                  |
| Advanced Preparation:    | None  |
| Recommended CPE Credits: | 35 Credits - Specialized Knowledge and Applications     |
| Programme Level:         | Intermediate  |

## Summary by Day:

- Day 1: Overview, Navigation, Outline creation, ASO and BSO comparison and conversion
- Day 2: Loading metadata and data, Enhanced reporting capabilities
- Day 3: Smart View, Block Storage optimisation, Task automation, Security
- Day 4: Aggregate Storage optimisation, Calculation methodologies and scope control (Calc Scripts)
- Day 5: MDX Queries, Calculation conversion, Case Study

## Detailed Agenda

### Essbase Overview

- Introduction to Essbase
- Using Essbase with Smart View
- Exploring dimensionality
- Introduction to Essbase calculations
- Navigating EAS

### Application Build

- Application and database design
- Creating an application and database
- Understanding generations and levels
- Outline maintenance
- Building Time, Scenario, Years and Accounts dimensions
- Block storage overview

### ASO Overview

- Comparison of BSO and ASO databases
- Aggregate storage outline conversion
- Loading metadata and data
- Load rule overview
- Load rule methods
- Building the Product and Markets dimensions using load rules
- Loading data using load rules
- Loading data and building dimensions with a single load rule
- FDMEE overview
- EAL overview

### Enhanced Reporting Capabilities

- User Defined Attributes (UDAs)
- Attribute dimensions
- Shared members
- Text and date members
- Format string
- Varying attributes

### Reporting

- Building Financial Reports
- OBIEE overview
- Smart View overview
- Smart View – Ad Hoc Analysis
- Smart View – Options
- Smart View – Functions
- Smart View – Smart Slices
- Smart View – Smart Queries
- Smart View – Embedding Reports

### Block Storage System Administration

- Specifying settings for optimal performance
- Caches and buffers
- Data compression
- Removing database fragmentation
- Maintaining the Essbase environment
- Task automation using MaxL
- Block storage review

### Security

- Hyperion Shared Services
- Essbase Administration Services

### Aggregate Storage System Admin

- Creating aggregations
- Data compression
- Loading data and the load buffer
- Concurrent loads
- Trickle feeds and slices
- ASO caches
- Outline paging
- Compacting the outline file
- Back-ups
- Changing compression

### Calculations

- Calculation methodology
- Member formulas
- Variance with member formulas
- Calculation scripts
- Navigating the calc script editor
- Back calc calculations
- Intelligent calculation
- Block creation

### Calculation Scope

- Calculation scope using FIX
- Calculation scope using IF
- FIX or IF?
- Controlling the calculation scope using cross dimensional operators

### Designing Calculations

- General design considerations
- Writing calculations using functions
- Relationship functions
- Mathematical functions
- Range functions

### MDX Queries

- MDX overview
- MDX query structure
- Case sensitivity, layout and syntax
- Comments
- Identifying dimensions and members
- Tuples and sets
- Converting BSO member formulas
- Function return types
- Formula conversion
- Aggregate storage calculation order
- Conditional calculations
- Variance calculations

### Case Study