

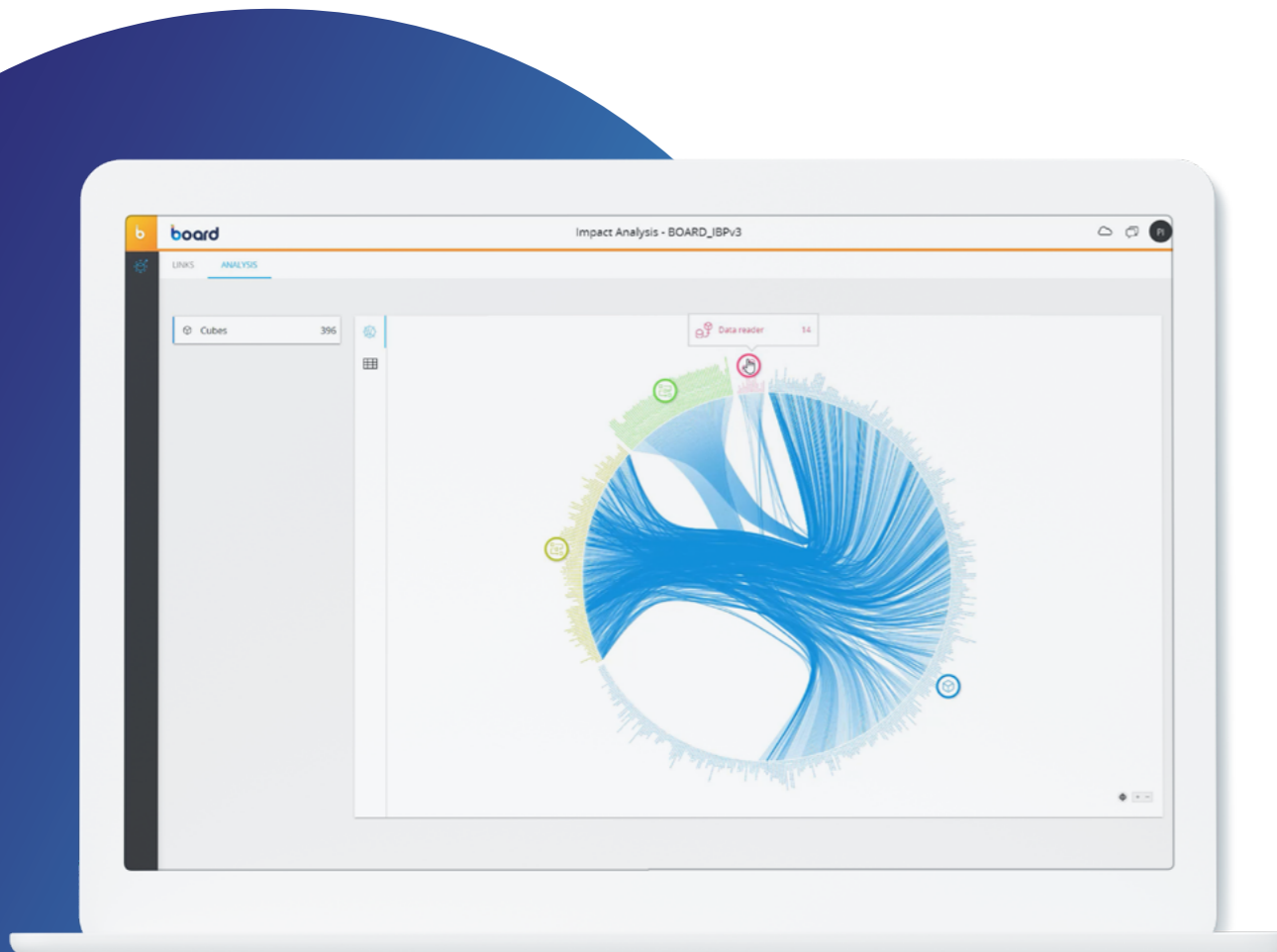
A Guide to the Board 12.x upgrade



1. Document Scope

The scope of this document is to describe the steps to upgrade a Board Solution to Board 12.x for Customers and Partners.

The document provides recommendations about how best to approach the database and capsule upgrade process by detailing best practice advice and highlighting important points of attention.



2. Upgrading your Solution to Board 12.x

The upgrade of the Board Solution to Board 12.x is a seamless journey, during which different activities must be completed within a defined sequence whilst ensuring the synchronization of all teams involved. Please find below a step-by-step narrative of this journey.

Deliverables and Implementation Tips

Before beginning the upgrade of a Board solution to Board 12.x there are some mandatory activities which must be implemented. These activities are strongly recommended to ensure the success of the upgrade.

Preliminary activities

Set-up a development environment

⚠ Mandatory activities

Prepare a development environment with the same version of Board currently in use in the Production instance of Board. This environment will be used to perform those activities necessary to achieve the upgrade to Board 12.x.

📄 Optional activities

None

👁 Attention points

Ensure a backup of the entire solution (all databases and capsules) is taken before any work is undertaken and stored securely for roll-back purposes.

Extract All Info-Cube Data

⚠ Mandatory activities

Extract data from all info-cubes of the Board database.

📄 Optional activities

None

👁 Attention points

- Ensure there is sufficient storage capacity to enable the extraction of all cube data before beginning this process.
- By default (using the database 'extract all' feature), the extraction path used by Board is c:\board\dataset\database_name.
- Cloud Customers must extract such data in the z:\ storage area, therefore an ad-hoc 'Extract All' procedure must be configured.
- It's important to note that only the first version of each cube is extracted during this process.

Uninstall Board

⚠ Mandatory activities

Uninstall the existing Board installation.

📖 Optional activities

None

👁 Attention points

It is not possible to upgrade Board Solutions from versions older than 10.x. A migration to at least Board 10.x release must take place before the upgrade to Board 12.x happens.

Install Board 12.x

⚠ Mandatory activities

Install the latest available Board 12.x version.
 For On-Premise Customers, installation is as easy and straightforward as per previous versions of Board. Any Board versions present on the server must be uninstalled before the installation wizard of Board 12.x is executed.
 For Cloud customers, the upgrade process can be initiated by raising a ticket through the Board Support Portal. This will be routed through to the Board Cloud Operations team and must contain the instance name (e.g. customer1-s1.board.com).

📖 Optional activities

None

👁 Attention points

- It's advisable to install the latest Board 12.x available. Contact the Board Support Team for more information on the roadmap and release plan.
- Please note that Board 12.x is not shipped with a Windows Client. For that reason, it's extremely important that all teams involved with the upgrade process familiarize themselves with the web designer interface.
- Stand-Alone Licenses are no longer permitted and need to be transferred to Server named License.
 If additional licenses are required, the commercial process should be initiated in advance of the upgrade process.

★ Milestone: You are ready to upgrade your Board Solution to Board 12.x

As described below the upgrade of a Board solution is straightforward. The process is largely managed automatically by the Board software with minimal user intervention required.
 The focus of Project team should be the evaluation of the solution to identify those areas that can be improved with the adoption of those new features made available in Board 12.x.

Data-model

⚠ Mandatory activities

Open the database with Board 12.x from the data model menu and confirm that you would like to upgrade your database when prompted by Board.

Execute a reload all action.

📖 Optional activities

None

👁 Attention points

- If the extraction of the cubes has been performed in the default path, during the upgrade process, the cubes are automatically reloaded. If the extraction of cubes has been performed in a custom path (for Cloud Customers z:\database_name\), a 'Reload all' procedure must be created pointing to the specific location where the extraction of the cubes took place.
- **IMPORTANT:** A copy of the existing database is NOT maintained automatically by Board. Ensure you perform and maintain a safe back-up before proceeding.

Capsule

⚠ Mandatory activities

Open the Capsule with Board 12.x and agree to convert the capsule when prompted by Board. Note: this happens when you switch from play mode to design mode and only for those Capsules that are not web ready yet (i.e. using the Board WinClient only). You can recognize those for their extension that is still cpsx.

📖 Optional activities

None

👁 Attention points

- Please note that it is not necessary to upgrade the Capsule if you intend to simply use it in play mode.
 The upgrade process is only necessary should you wish to make changes and further develop your capsule within Board 12.x.
- A copy of the Board Capsule is automatically created by Board and stored in the default capsule location. You can identify which is the backup version of the capsule by the "(bck)" string at the end of the capsule name. e.g. My_Capsule(bck).

★ Milestone: Solution Translated

4. Regression Test

The regression test is a key phase in the upgrade process and is required to ensure the seamless upgrade of back-end meta-data and procedures as well as front-end objects such as end-user screens and tools.

Board 12.x introduces changes aimed at improving and simplifying the management and creation of Board data models. Board 12.x offers brand-new HTML5 capsule technology and a range of new functionality that makes the creation, management, and use of applications simpler. For this reason, in some cases, specific actions are necessary to enable the current solution to benefit from the new technology.

This section of the document aims to outline those areas in which improvements have been introduced and therefore, those areas that require specific actions and attention. All new features (and retired old features) with the potential to impact existing applications have been detailed below. The required modifications to overcome impacting changes or to maximize the benefits made available in Board 12.x are mentioned as well.

Database	Impact & Suggested Solution
Time range	None
Entity & Relationship	None
MXC Cubes	<p>MXC Cubes are not available anymore. All MXC cubes are translated in Integer type info-cube during the upgrade process.</p> <p>Impact & Suggested Solution The layouts using such cubes will stop showing correct aggregated numbers (OR logic condition). It is recommended to redesign the layout using the Aggregated Functions (Distinct Count) feature using the Integer info-cube that replaces the MXC's one.</p>
H-OLAP info-Cubes	<p>H-OLAP Cubes are not available anymore.</p> <p>Impact & Suggested Solution The suggested action is to split the hybrid cube creating MOLAP and ROLAP cubes before the upgrade and adjust the layouts or drill down paths accordingly</p>
Expression	<p>Expressions have been deprecated in Board 12.x.</p> <p>Impact & Suggested Solution Those layouts using expressions will no longer work. Suggested solution is replacing the expression with an algorithm block.</p>

Capsule	Impact & Suggested Solution
Data-reader	<p>All Data Readers built in the 'Connector' Tab, such as OData, Rest, Yahoo!, are only supported in play mode. This means that the existing Data Readers can still be initiated and called from procedures however they cannot be further modified or created from the scratch.</p> <p>Impact & Suggested Solution Board 12.x includes an ODBC connector driver that can get data connecting to any available REST API. This connector is available for on-premises and Cloud Customers. Suggested solution is to rebuild your REST data-readers using this connector.</p>
Rule	None
Trellis	<p>The trellis object is not supported.</p> <p>Impact & Suggested Solution It is replaced with an empty tile in the existing screen. Suggested solution is reengineering the feature combining a page with the desired chart</p>
Cockpit	<p>The cockpit object will function only in play mode.</p> <p>Impact & Suggested Solution The object is visible, but its layout and settings can't be changed. Suggested solution is replacing the cockpit with the new 'Gauge' object.</p>
Menu	<p>The Capsule Sitemap is not supported.</p> <p>Impact & Suggested Solution The existing Menu Objects are working but any changes can be configured from the navigation bar on the left of the screen when in edit mode on the web screen designer.</p> <p>From there it is possible to create folders and screens and move screens into different folders. The menu object will reflect the structure created from that toolbar. If you are upgrading an existing capsule where a sitemap has been defined you will see folders and subfolders organized in that toolbar as per the old sitemap configuration (and the menu will reflect that as well).</p>
Broadcasting	<p>Board 10.5 vastly improved Board's Broadcasting functionality. Broadcasting solutions built on the older technology found in Board 10.3 (or earlier) are no longer supported.</p> <p>Impact & Suggested Solution Suggested solution is to rebuild the broadcasting function using the latest Board feature. Tip! Explore the possibility to cast reports using the 'Send to' or 'Subscription' features.</p>
Presentations	None

5. Strategies for your Project Upgrade

The purpose of this section is to identify all the activities required for a successful regression test, depending on the strategy selected.

Strategy 1: Like for like upgrade

The like for like upgrade strategy implies the simple upgrade of the Board SW and the few clicks necessary to translate the data-model and the capsule. This solution is advisable if the timelines for the upgrade are very tight and your Board Solution performance and usability are already satisfactory. The like for like strategy still requires the fix of the breaking changes (deprecated features and functions) and the completion of the regression testing on existing procedures to identify any data flow actions that may require the use of the backward compatibility mode.

Strategy 2: Upgrade and Optimization

The Upgrade and Optimization strategy takes a step beyond the like for like upgrade and supports data-model improvements by using the new Board 12.x features. After completing all the preliminary activities and the transition of the Board solution, the regression test is not just a validation step but the chance to optimize the solution:

Dataflow & temporary cubes: in Board 12.x, the dataflows have been totally reengineered to make them faster and smarter. Board 12.x brings a much simpler way to manage complex calculations, improving the performance of the more demanding dataflow processes. To take advantage of such improvement you may:

- Spend some time to better understand the calculation domain of your dataflow and if possible enable the 'limit calculation' option (Limit calculation to tuples where values of at least one cube of the Layout are non-zero).
- Replace redundant procedure steps with the adoption of the temporary info-cubes and replace the open sparsity data-flow with the much faster 'extend'option (Execute calculation on existing sparse combination of target cube for all the dense).

Data model & max item number: the max item numbers if in auto-mode are automatically re-adjusted based on their growth and optimized info-cube by info-cube. This facilitates the management of those very large entities with difficult to predict rates of growth and impacts the performance of the solution.

Identity Provider: this optional Administration Layer gives the opportunity to integrate the Board security criteria with your authentication provider's attributes and the users the full flexibility to enroll themselves minimizing the cost of administration and solution management.

Extract cube (and versions)

Board 12.x introduced a new paradigm of the Extract Cube procedure command. The output file may now differ.

Impact & Suggested Solution

The output files of the Extract info-cubes command must be checked to ensure their compatibility with any existing data readers. If the structure of the file has changed, the data reader must be rebuilt. Alternatively, the use of the order by option in the extract command should be considered to ensure the file is in the same format extracted by the previous version of Board.

Extract Tree (E/R)

Board 12.x introduces a new paradigm of the Extract Tree procedure command. The output file may now differ.

Impact & Suggested Solution

The output files of the Extract Tree command must be checked to ensure their compatibility with any existing data readers. If they aren't the data-reader must be re-built.

Dataflow

Board 12.x introduces a new paradigm in Dataflow execution, making it much easier to control the data calculation domain with the purpose of avoiding unnecessary calculation and optimize performance. During the upgrade, this new paradigm is adopted by default (Limit calculation to tuples where values of at least one cube of the Layout are non-zero)

Impact & Suggested Solution

If the data-flow command stops working enable the back-compatible option (Execute calculation on existing sparse combination of target cube for all the dense).

MDX federator

The MDX federator feature is not supported. No solution is currently available.

Strategy 3: Upgrade 2.0 – Solution improvement

The Upgrade 2.0 strategy completely embraces the new technology that Board 12.x provides, reengineering parts of the current solution and leveraging the new powerful Board 12.x's features:

- Highly-parallel processing: processes that could previously cause queues during execution are now executed in parallel. This allows multiple users to run actions such as data reading, ATO functions, and dataflows concurrently. The suggested action is to evaluate the current flow of your datamodel updating/uploading processes and how they can now better align to business demands.
- DeepLocker: it extends the DataEntry functionality of the DataView object with the ability to lock the Data Entry on some cells of a cube independently from the level of aggregation you are visualizing. This gives much more flexibility in the creation of data entry screens, for a better user experience (much fewer clicks) and a very clear and clean implementation design.
- On the user experience, Board 12.x marks the shift to a smarter and simpler way of accessing and utilizing information. Users can now easily subscribe to a report, defining the frequency of updates and the format they want to receive in their inbox. Alternatively, the "send-to" option allows business users to schedule periodic presentation of updates to be sent to a defined Board user(s) or user groups. As this functionality can significantly shift the delivery and consumption of information we highly recommend an evaluation be completed, assessing how this could positively impact your traditional 'report push' approach into a modern user's 'report pull' solution.
- The unbalanced hierarchy is a very powerful new functionality and should be considered by those organizations that struggle with traditional unbalanced set of data such as the Chart of Accounts or the Organization Cost Centers. This feature combines the best of data interaction (select, drill), of data visualization (grouping and ungrouping) and data simulation (rules, data entry, data split and splat).
- The Board Excel Add-in is vastly enriched with spreadsheet features that let you design your data entry form merging and combining at cell level, areas with the traditional spreadsheet rules, format and calculation logics and areas linked to the Board info-cubes making the Excel add-in a valid alternative to the Capsule Screen.

About Board

Board is the Intelligent Planning Platform that offers smarter planning, actionable insights and better outcomes for more than 2,000 companies worldwide. Board allows leading enterprises to discover crucial insights which drive business decisions and unify strategy, finance and operations to plan smarter and achieve full control of performance across the entire organization. With Board, companies can manage and control their entire planning process from goal setting down to operational execution in one, user-friendly environment.

Partnering with Board, global enterprises such as H&M, BASF, Burberry, Toyota, Coca-Cola, KPMG, and HSBC have deployed end-to-end planning applications at a fraction of the time and cost associated with traditional solutions. Board International was founded in 1994 and has now 25 offices around the world and a global reseller network. Board has been implemented in over 100 countries.

Board International has long been recognized by leading analysts and subject matter experts including Gartner, Nucleus, and Dresner.

www.board.com

EN2208U

www.board.com