MasterConcept, Version 17.0

Table of Contents

1   Introduction

This readme contains information about Ides MasterConcept.

1.1   How to use this document

Please read this file thoroughly. If there are any questions please contact us (see Contacting).

1.2   Released Versions

After installing you should have the following versions on the different applications/modules.

Product	Version
MasterExplorer	17.0.0.130
MasterDatabase	17.0.0.130

2 Where to find information

2.1 Information Files

This file, readme.pdf, contains release notes for MasterConcept.

Note: If there are any late changes to functionality that was not included in the manuals there is a Late Changes.pdf on the CD that contains the changes.

2.2 Online Resources

2.2.1 World Wide Web

Check Ides' website regularly for information. The support team will post technical papers for solutions and workarounds. Here you also can find information on updates and new versions.
www.idesglobal.com
blog.idesglobal.com

3 Contacting Ides

3.1 Support

Contact the support team by phone: +46 (0)13 31 87 86 or email: support@idesglobal.com

4 Equipment requirements

The following chapters describe the hardware and software requirements for the MasterConcept products. Please note that this list is only a recommendation to reach a good performance for a system with one server and 5 clients having only MasterConcept Software installed.

Better hardware will improve the performance.

4.1   Hardware requirements

4.1.1   Server recommendation

Name	Comment
Processor	Intel® Xeon® Dual or Quad-processor
Internal memory	3 GB (x86) 4 GB (x64)
CD-ROM drive	40X Max CD-ROM drive
Hard disk	Type: SATAII or Ultra3 SCSI 10,000rpm hard drives
Hard disk size (minimum)	4,5 GB (system and temp files) 9 GB (database and files)
Network	100 MB/s or better

4.1.2   Used disk space

Name	Comment
Oracle server Software	4,5 GB
Oracle data files	500 MB
elMaster data files	500 MB
elMaster Software, symbols	320 MB

4.1.3   Client recommendation

Name	Comment
Processor	Intel I5
Internal memory	3 GB (32 bit) / 6 GB (64 bit)
CD-ROM drive	40X Max CD-ROM drive
Hard disk	SATA-3, 7,200 rpm
Hard disk size	120 GB
Network	100 Mbps
Graphics	1,280 x 1,024 true color video display adapter 128 MB or greater, 21" Monitor

4.1.4   Used disk space

Name	Comment
Oracle Network Client Software	1 GB
AutoCAD Software	6 GB
elMaster Software	320 MB
elMaster Software, symbols	320 MB

4.2   Software Requirements

4.2.1   Operating System

64-bit version of the operating system is recommended due to memory constraints in the 32-bit versions.

Name	Comment
Windows 7	
Windows 8/8.1	
Windows 10	

4.2.2   Server

Name	Comment
Oracle Standard version 11g	
Oracle Standard version 12c	

Unicode Support

To Support of Unicode in your Oracle database set the **Oracle Database Character Set** to UTF8.

Name	Comment
NLS_CHARACTERSET	UTF8

4.2.3   Application Server

Name	Comment
Windows Server 2008r2, 2012, 2012r2	
Windows Authentication	You need to install the Windows Authentication Feature
Optionally a SSL certificate for the host system (if using https)	

4.2.4   AssetMaster App

Name	Comment
iOS	9.0.0 or later
Android	5.0.0 (API 21 – Lollipop) or later
Windows	Windows 10 November Update (build 10586) or later. Side loaded UWP apps must be allowed.

4.2.5   Client

Name	Comment
Oracle Client	Version 11.2.0.3 or higher, prior versions do not include support for .NET 4.5 and EF. The components needed are - Oracle Data Provider for .NET - Oracle Provider for OLE DB
Autodesk AutoCAD 2015	Including all AutoCAD based products.
Autodesk AutoCAD 2016	Including all AutoCAD based products.
Autodesk AutoCAD 2017	Including all AutoCAD based products.
Autodesk AutoCAD 2018	Including all AutoCAD based products.
Autodesk Inventor 2015	
Autodesk Inventor 2016	
Autodesk Inventor 2017	
Autodesk Inventor 2018	
Autodesk Revit 2015	
Autodesk Revit 2016	
Autodesk Revit 2017	
Autodesk Revit 2018	
Autodesk Navisworks 2017	Update1, Manage, Simulate
Autodesk Navisworks 2018	Update1, Manage, Simulate
Microsoft, Office 2007	
Microsoft, Office 2010	
Microsoft, Office 2013	
Microsoft, Office 2016	
Microsoft, Office 365	
Microsoft.Net Framework version 4.5	
Microsoft MDAC	Required to enable use of Access as a format for briefcase, 32bit only

On 64-bit only 64-bit versions of AutoCAD and Oracle client are supported.

If you have any questions concerning the software or hardware requirements contact us. See "Contacting ".

5 Functionality

5.1 Key Features

5.1.1 Revit CAD-Driver and Industry Foundation Classes (IFC) Driver

New functionality to work with 3D models in MasterConcept.
New/Improved functionality such as

- View Models in MasterConcept
- Create Objects from Models
- Integrate Data with MasterConcept Objects
- Create Documents from views in the models
- Create Fault Reports and Work Orders in viewers

5.1.2 A more intuitive MasterConcept

We have focused to make the document handling easier to use, lowered the threshold for users to get started.

Office Driver

The Master Concept Document Addin for Microsoft Word and Excel allows for a simpler way to work with your documents.
You can save and automatically create PDF copies of Office Documents opened from Master Concept by a single click of a button integrated in the Office ribbon.
You can import new Documents into Master Concept, also by a single click of a button integrated in the Office ribbon.

My Documents

A new static grouping node called My Documents is added to the Document Tree, containing all documents you have created. This node can be grouped separately from the regular documents node, meaning you can view your own documents in one way and all others in a different way.

A Send to Master Concept in the file Explorer

A new functionality send files from file explorer into the MasterConcept database.

5.1.3 AssetMaster

We have continued developed this module and added some exciting new features

- AssetMaster App to handle My Work Order, Report Work and report Fault Reports
- Round for Work Orders and Preventive Maintenance
- Added support for Checklist and Protocols

5.2 New Functionality

5.2.1 User Interface

Customizable context menus

It is now possible to customize certain right-click menus. Available for document- and object menus in the MasterExplorer tree. To modify a menu, go to the Settings dialog.

Customizable Panel Layout

It's now possible to customize panel layouts in the Data Tab.

Automatic Merged PDF Preview

Selecting a document node with the Preview Tab open will automatically create a merged pdf preview file for display. Unfortunately this can be a time consuming process if there are a large number of files, so we have added a control. The variable PM_DOC_COUNT holds the number of documents you feel is appropriate to display. If the number of documents in the selected node is greater than this value, a warning is shown.
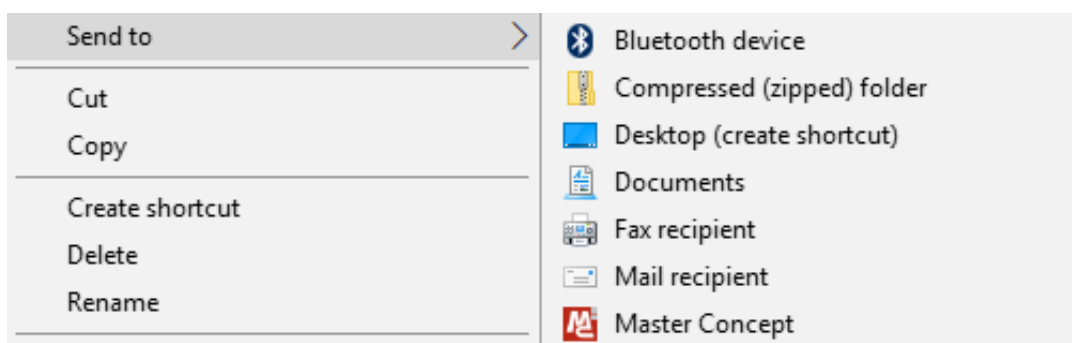
Quick Search changes

A number of changes to simplify the Quick Search bar.

- The Case Sensitive setting is shared with the setting in Advanced Find.
- A new Search hit link is displayed when a search returns more than one result. The tree is also no focused to the first search result automatically unless only one result is found. You can quickly jump through the search result by clicking or right-clicking the search hit link or by pressing F3 or shift-F3 to move forward and backward in the results.
- The arrows for going back or forward in the tree-selection history has been removed, however you can still use the functionality using the keyboard shortcuts alt-left or alt-right.

5.2.2 Document handling

Windows Send to menu

It's now possible to import documents from Windows file or folder context menu.

Viewer setting in Document Starts

A new setting, *Viewer*, has been added to document start conditions in the *Document Type Configuration* dialog. The setting is used to determine which internal viewer to use at the document start.

Quick button for moving the workflow of a document to next phase

One could right click on a document in the tree to get a mini ribbon menu. That menu now contains a button for moving the workflow of the document to the next phase. The button is also used for updating the document when the workflow requires it.

Simple documents notes view

The preview component for documents now contains a panel showing all notes the document has. It's also possible to add new notes to the document through this panel.

Including folder structure when exporting documents (Case 31982)

Documents exported from an information item structure can now be placed in a corresponding file folder structure on disk.

Document Type settings on Information Objects

You can now specify a Default Document Type on Information Objects. This is used when importing or creating new documents under the object. This makes adding and organizing you documents much simpler.

Browse to Documents

A Document can be found under both the Documents Structure and the Information Structure in Master Concept. In version 17, the program will prioritize the Information Structure over the Document Structure when searching for your documents.

Import Documents

We have added a number of new features to simplify the process of importing documents:

- Read Default Properties from document -
This feature allows you to read a set number of properties from the Custom Properties of an Imported Document to setup key values such as Type Code, Variant, Format and Language. This mean that you can prepare document templates that you distribute and you will always get the correct type when you import the created documents.
This feature are controlled in the Import Documents Settings dialog or by setting the variable DOC_IMPORT_READDEFAULTPROPS.
- Automatic Import
This feature allows you to import documents automatically without showing the dialog if all necessary data is available. This is true from inside Master Concept as well as from the Office Driver or the Windows Explorer Send To menu.
Getting all available data automatically can easily be setup using the AutoDoc functionality combined with either Default Properties from the document itself, or by setting up default Document types by the imported files extension.

5.2.3 Design

Adaptive Component Insert

The insert function for objects and articles into drawings is smarter. You can still configure what symbol an article should use in the article dialog, but if you don't the program will give you a suggestion of symbols to use based on what symbols has been used previously for that article or object category.

You can also ignore the suggestion and select a symbol manually.

Automatic Connection Diagrams

It is possible to generate Connection diagrams for all external connections (one level) for an enclosure.

5.2.4 AssetMaster

AssetMaster App

A new App for AssetMaster includes functionality to work with work orders and to report faults and suggestions. It is available for iOS, Android and Windows 10 devices. For more information see:

http://www.idesglobal.com/en/masterconcept/assetmaster/

The app handles things like:

- My Work orders
- My Fault reports
- My Improvement Suggestions
- Work order Details
- Report Work
- Create Fault reports

- Create Improvement Suggestions
- Work with checklists/protocols
- Set measured value
- QR-codes scan
- Online/Offline handling

Report Historic Work Order

It is possible to create a work order and set it as closed in one go, when an action has already been taken to resolve a situation.

Work orders - Status

- Read-only
- Default Closed
- Published to AssetMaster App

Working with Checklist and Protocols

With this version, you can have documents to work close with the Work Order

Connected Spare Articles

You can now select the articles related to the object

Round

Round has been added for both Work Orders and Preventive Maintenance this mean that you can group WO and PM together and handle them as one

Last Performed Condition and Current Operation Time

Two columns have been added to the *Preventive Maintenance Overview* dialog to give the user more information about the current status when it comes to operation time based work orders. The columns *Last Performed Condition* and *Current Operation Time* have been added to help the user to see which operation time amount was causing last work order and what the current status is for operating hours.

Add spare/contains article

It is now possible to add an article as both spare and containing article.

Adding multiple library texts to work order

Multiple library texts can now be added when creating the description text for a work order. Previously the user had to choose only one library text and edit it.

Supplementary Articles

It is now possible to tag an article as a Supplementary Article.

Maintenance – Spare Parts - Article Lookup

It is now possible to filter sub articles in the Article Lookup.

5.2.5 CAD

Revit Server

Added support for Revit Server.

CAD Driver for Revit

It's now possible to save views as PDF documents.

CAD Driver for AutoCAD

It is now possible to import documents from AutoCAD.

It is now possible to attach a related document as Overlay (Case 39903).

5.2.6 Electrical & Instrumentation

Edit Terminals

The edit terminal dialog is now accessible from the context ribbon MC Edit in design when a symbol with database a connection is selected.

It is possible to edit all terminals for an object in the edit dialog when the drawing is in batch or online mode that makes edit of black boxes and terminal rows much easier.

Insert Attributes

A new right click option is added in the edit symbol dialog; Add attribute. The function inserts a new symbol and connects the attribute with the current data row so that it is displayed in the drawing. Note a new symbol Mluser;applik;dataattribute1 is required

5.2.7 Individuals

Individual state

Added new property to Individuals; *Status.* Describes the state of the Individual.

Document relations

There is a new panel in the individual dialog where it is possible to work with document relations.

5.2.8   Other

Admin dialog for advanced search fields in MasterPortal

There is a new dialog for setting which fields that are to be shown when doing advanced searches in MasterPortal.

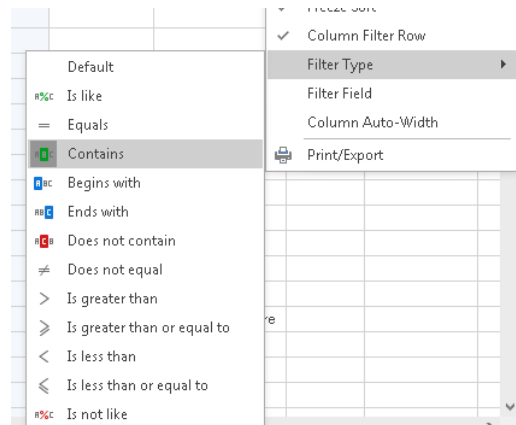## 5.3   Changed Functionality

5.3.1   User Interface

Combined List has been removed

The combined list has been removed, the document, object and individual lists can instead be used depending on what is sought after.

General Grid Filter Functionality

The general functionality of the Column Filter Row in the grids has changed. By default the *Contains*-filter will be used, however this can be changed from the Grid Options menu. Each grid will also remember their individual setting, making for a much simpler and more powerful search functionality.

Persons can have images

It is now possible to assign images to person items which will then show up in several places throughout the application.

Case sensitive searches

There is a toggle button in the search dialog which can be used to toggle case sensitive vs. case insensitive searching. By using case sensitive search there may be a performance benefit to be seen.

Wildcard searches in tree search field

It is possible to toggle in the tree settings dialog if the search field automatically should perform contains searches or if it should be required to add wildcards to the search term such as "*" and "?".

5.3.2   Project Handling

Project type

A new concept, *Project type*, has been introduced. In many ways Project type is replacing the workflow machine functionality for projects. Functionality that project type has beyond workflow machine is that label settings can be done according to project type.

Project Lock (Case 46284)

An issue where the project locking functionality failed for read only object workflow phases has been resolved.

5.3.3 Document Relations

The behavior of type Floating has been changed. Now the parent document references the last **approved** revision of the child document.

The default value for Type has been changed from Fixed to Floating.
The default value for Xref has been changed from True to False.

5.3.4 Connection Handling

Get Cable/Wire (Case 47085)

An issue has been resolved where the Get Cable/Wire function in Edit Connections wasn't working properly for wires.

5.3.5 Design

Letter Codes

Letter Codes for designations have some new functions.

Leading zeroes; it is now possible to specify how long the number part of the designation should be per object category.

Subcategories; an object category can now have many different lettercodes, with one default. When creating a new designation the user can select which one to use

5.3.6 MasterPortal and docMaster Mobile

Cancel now works in warning dialog

If there have been changes made in the docMaster Mobile grid when the preview ribbon button is pressed, there is a warning that the changes will be lost. The cancel button will now properly cancel the operation.

Wrong date format in grid

In certain cases, the grid would report dates down to hundreds of a second, it should now only list down to day.

5.3.7   Other

New Label type – Multiline Text

A new label type to be used when it is desirable to have text on more than one row.

5.3.7   Other

6 Known Limitations

Changes do not take effect immediately

Not all changes made in the Administration dialogs will take effect immediately, so after changing something in the administration dialogs it is advisable to restart the MasterExplorer application to ensure that the changes will take effect.

Grid Limitations (32-bit only)

When loading data into the grid the memory limitation in the product is around 1 GB. That means the document list can fetch approx. 120.000 rows and the Object List approx. 110.000 rows.

We will investigate this further to solve this limitation.

Update cabledef symbols

Update from database does not update cable codes if you have both codes and an article on the connection. The codes will not be updated until you save the drawing.

Article Summary Reports

Does not work for Word and Excel reports, the formatting of the summary are made in the crystal report.
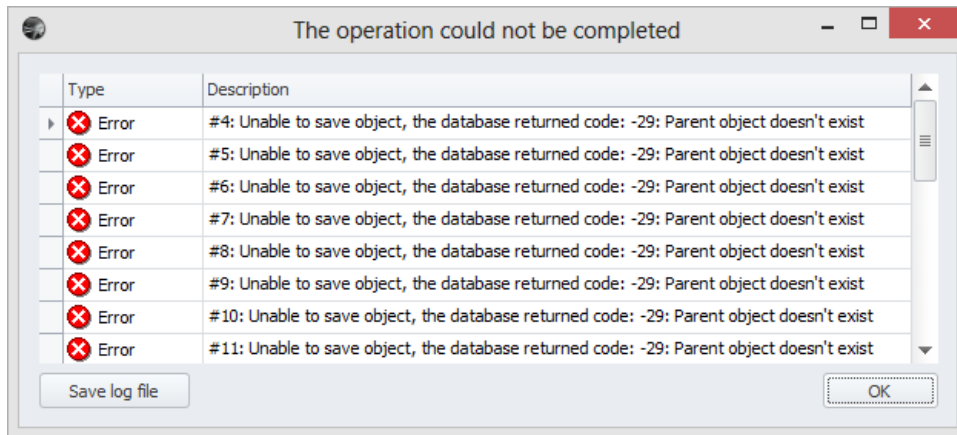
Preview of MS Office documents on a 64bit system

To be able to dock an instance of Word or Excel in the preview tab this application must be 64bit when the MasterExplorer is running as a 64bit application. However, MS Office will by default install the 32bit version even on 64bit systems to improve backwards compatibility.

This means that provided we have a standard installation of Office and the Explorer on a 64bit system, it is not possible to display Office documents in the preview window. They will instead open in a separate Word or Excel application window.

When imported objects are related to each other the object import may produce errors

When objects are related to each other via object-object relations or structurally, the following messages may appear when importing. In order to solve the errors, please import the objects again until the messages no longer appear. Also, make sure that all objects can be imported (e.g. locked in another project) before importing.

You may also get errors complaining about a missing "CETLTER_RETDOOB_FK" relation. In order to solve this, import the documents and objects until everything is marked as imported. Then re-import the connections.

Report Filer and Report Format in Briefcase

The Briefcase function do not handle report filter and report format. The report data is also not included.