

MAPILab Search for Exchange

Administrator's Guide

Version 1.9

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Introduction

The Administrator's Guide developed by MAPILab contains all necessary information about installation and configuration of MAPILab Search for Exchange. Please read the entire Guide thoroughly before performing Product installation.

The Guide consists of the following chapters:

- **Chapter 1.** Introduces basic Product features.
- **Chapter 2.** Gives the summary of Product architecture and allows to choose deployment type that suits your Company's needs.
- **Chapter 3.** Introduces the system requirements of the Product and allows to prepare computers for the Product installation, having installed required applications and components of the operating system.
- **Chapter 4.** Contains the data you can use while performing Product installation, as well as the necessary information about the initial Product configuration
- **Chapter 5.** This Chapter provides instructions on how to create and perform search queries.
- **Chapter 6.** Contains the data on Product licensing.
- **Chapter 7.** Contains basic information necessary to diagnose Product failures.

1. Product Overview

MAPILab Search for Exchange is a software product designed for searching elements in users' mailbox databases with the help of graphic instruments.

Basic Product features:

MAPILab Search for Exchange searches for elements (messages, attached files) in email server stores according to the criteria, specified by the administrator.

MAPILab Search for Exchange is an agentless product requiring no installation of any components on the mail server.

MAPILab Search for Exchange is an MMC snap-in with the interface administrators are familiar with.

Flexible search criteria supported by MAPILab Search for Exchange allow you to quickly find required items in all mailbox databases.

MAPILab Search for Exchange is a mass product, requiring no special skills necessary to install and deploy it. The Product deployment is easy and safe, and takes only a few minutes.

2. Product Architecture and Basic Terms

The Product consists of MMC snap-in only. This MMC snap-in can be installed on any workstation or server requiring no components to be installed on mail servers.

Product architecture and licensing scheme make it possible for you to install the necessary number of Product copies on administrators' workstations or servers.

3. System Requirements

3.1. Minimal System Requirements

System requirements for MAPILab Search for Exchange Agent are defined by Microsoft Management Console 3.0 and are as follows:

Supported Operating Systems:

- Microsoft Windows Server 2003 with SP1 or higher;
- Windows Server 2003 R2;
- Windows Server 2008;
- Windows Server 2008 R2;
- Windows Server 2012;
- Windows Server 2016;
- Windows Server 2019;
- Windows XP with SP2 or higher;
- Windows Vista;
- Windows 7;
- Windows 8;
- Windows 10.

The Product is also compatible with the following operating systems:

- Microsoft Small Business Server with SP1 or higher;
- Windows Small Business Server 2003 R2;
- Windows Small Business Server 2008;
- Windows Essential Business Server 2008;
- Windows Small Business Server 2011.

32-bit and 64-bit versions of the abovementioned systems are supported.

The following applications and components are required before performing installation of MAPILab Search for Exchange:

- **Microsoft .NET Framework v3.5 SP1 or higher** is the component of Microsoft Windows Server 2012/2008R2/2008 and Microsoft Windows 10/8/7/Vista. In case of other operating systems the platform can be downloaded from the Microsoft [download center](#).
- **Windows Installer 4.5 or higher** is the application installation and configuration service for Windows. For Windows Server 2003, Windows Server 2008, Windows Vista, Windows XP you need to download update from Microsoft [download center](#).
- **Microsoft .NET Framework v4.5.2** is required to enable PDF export functionality.
- **Microsoft Management Console v3.0 and higher** is the component of Microsoft Windows Server 2003R2/2008/2008R2/2012 and Microsoft Windows

XPSP3/Vista/7/8/10. In case of other operating systems the component can be downloaded from the [Microsoft Knowledge Base](#).

- **Activated DCOM service** (Distributed Component Object Model). The service is activated by default on any Microsoft Windows operating system. The Guide on activating and deactivating this component can be found in [this](#) article.

Installation Guide on these components is available on Microsoft website.

3.2. Supported Versions of Microsoft Exchange Server

MAPILab Search for Exchange is completely compatible with the following versions of Microsoft Exchange Server:

- Microsoft Exchange Server 2003;
- Microsoft Exchange Server 2007;
- Microsoft Exchange Server 2010;
- Microsoft Exchange Server 2013;
- Microsoft Exchange Server 2016;
- Microsoft Exchange Server 2019;

4. Product Installation and Configuration

You should have the following rights and privileges in order to perform Product installation and deployment:

- local administrator rights on the computer to install the Product on it. The computer, on which the Product is installed, shall be a member of the target domain. Having deployed the Product and checked its operability, you are able to use other domain computer or workgroup computer.

- Full Exchange Admin account.

- user's account with the cas impersonate rights for all the mailboxes to be searched in.

4.1. Product Installation

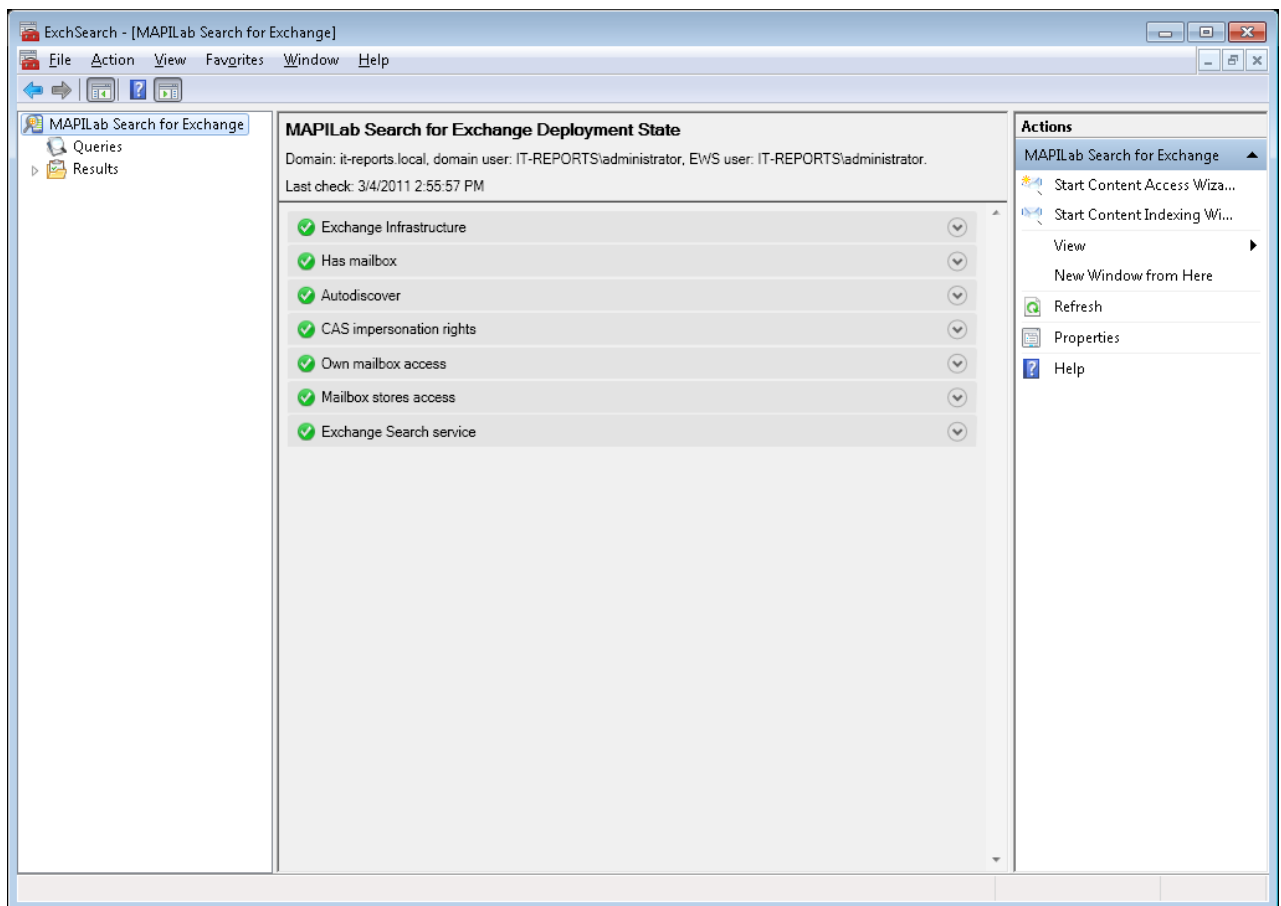
Product installation is typical and easy. To initiate the Product installation, start ExchangeSearchSetup.msi and follow Wizard's instructions.

4.2. Product Deployment

In order to deploy the Product the user, on behalf of whom MAPILab Search for Exchange is launched, shall be an Exchange Organization Administrator for Microsoft Exchange 2007, 2010, 2013, 2016 and 2019; for Exchange 2003 - shall have the rights of domain/organization administrator, and shall to be a local administrator of the computer on which the Product is installed.

To initiate the Product deployment, start MAPILab Search for Exchange. Select 'MAPILab Search for Exchange' in console tree. If the Product is launched for the first time, it will automatically start checking all necessary requirements for successful running. If you need to perform this operation again, click Refresh on Actions pane or in context menu.

In section 'MAPILab Search for Exchange Deployment State' the result of all executed checkups will be indicated. If there are failures during the checkup, consult the following chapters of this Guide.

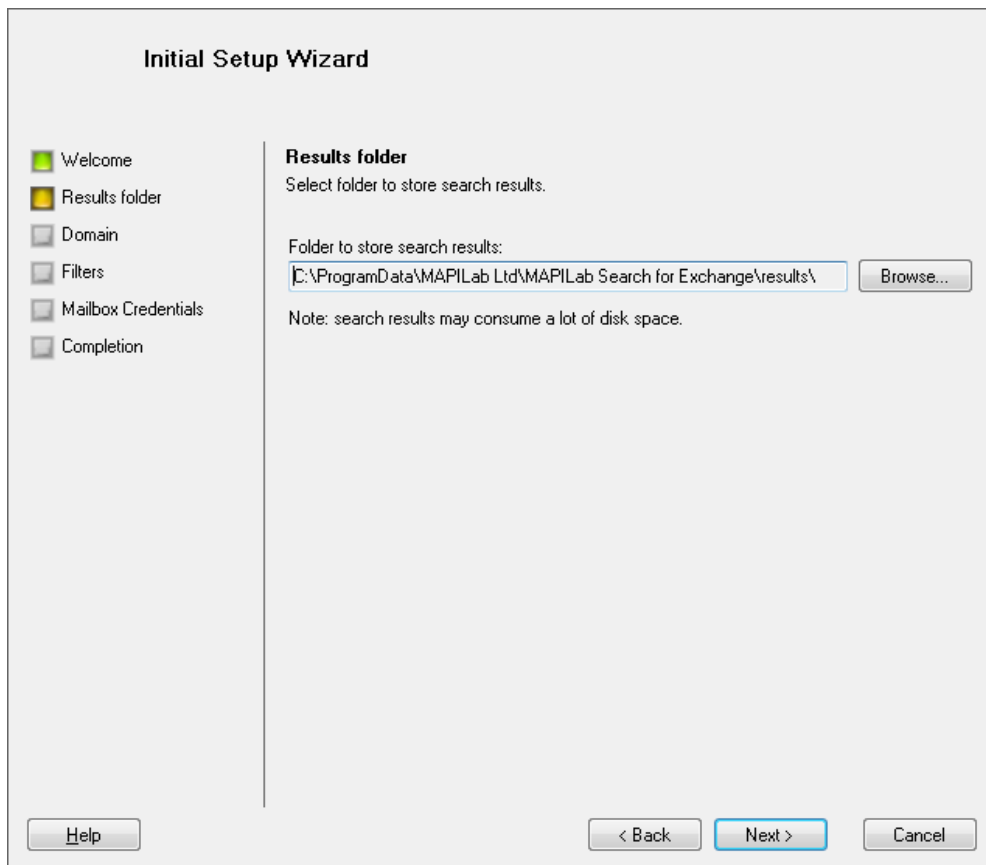


4.2.1. Launching Initial Setup Wizard

This Wizard helps to make various basic configuration settings for successful running of the Product. The details are specified in article 4.5 of this Guide.

In order to launch the Wizard select the appropriate option in Actions pane or context menu.

During Step 2, the Wizard suggests selecting the folder for saving search results.



During Step 3, the Wizard suggests selecting domain controller, from which Exchange configurations will be read, and credentials for logging in. These settings shall be specified only for a multi-domain environment or in case MAPILab Exchange Search is installed in a workgroup environment. For details see article 4.5.

Initial Setup Wizard

- Welcome
- Results folder
- Domain
- Filters
- Mailbox Credentials
- Completion

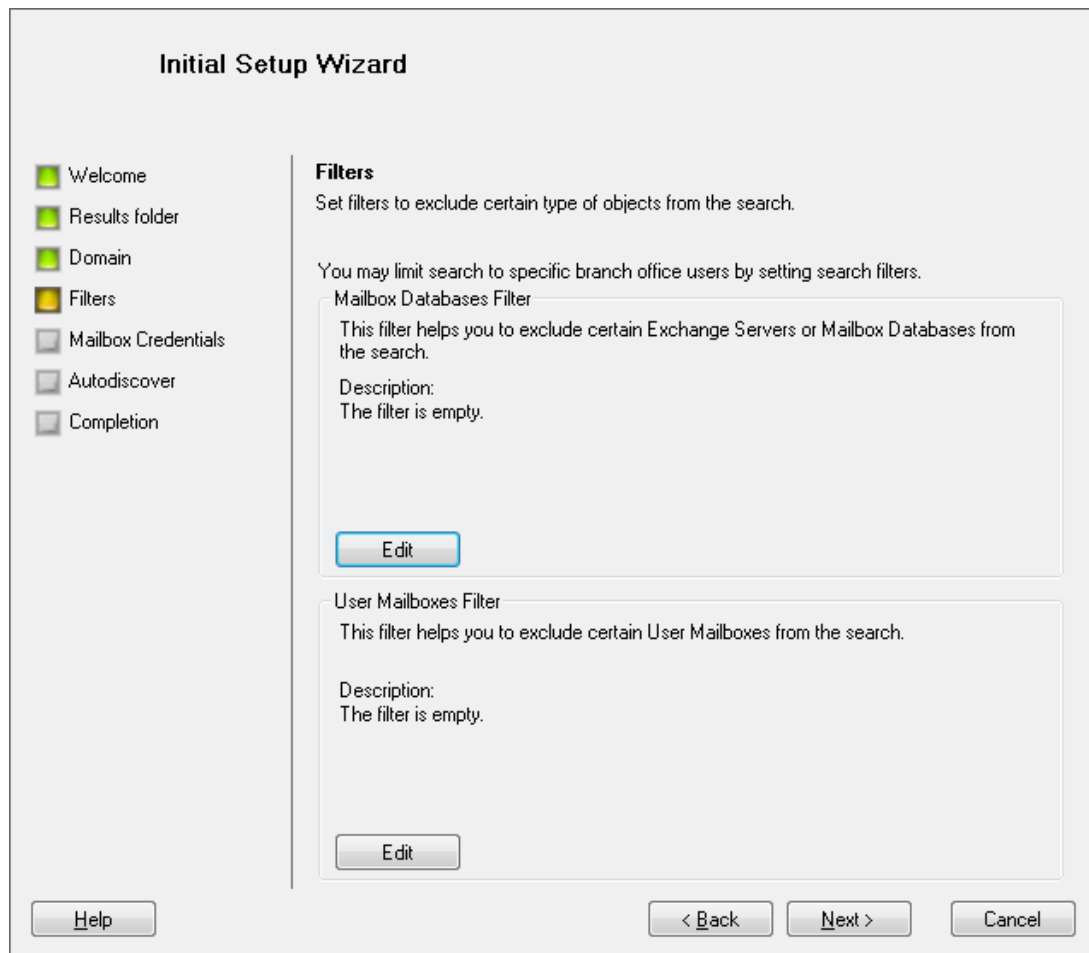
Domain

Select the domain controller and domain user credentials to connect the Active Directory.

Use the following Domain Controller instead of default:
Domain controller:

Use the following credentials instead of default:
Username:
Password:

During Step 4, you will be offered to install filters for the mailbox databases and mailboxes, where the search is executed. Search is carried out only in the storages which comply with filter. If the filter is empty, the search will be performed within all storages.



During Step 5, the Wizard suggests filling in the username and password, on behalf of whom the mailboxes will be searched. The option should be activated only if user's account (on behalf of whom the console is started) does not have necessary privileges for access to users' mailboxes, which are searched. All necessary user privileges as well as checkup procedure are specified in article 4.2.2 of this Guide.

Initial Setup Wizard

- Welcome
- Results folder
- Domain
- Filters
- Mailbox Credentials**
- Autodiscover
- Completion

Mailbox Credentials
Specify the credentials that will be used to read contents of mailboxes during the search.

Use current user credentials.

Use custom mailbox user credentials:

Username: ...
Example: DOMAIN\Username

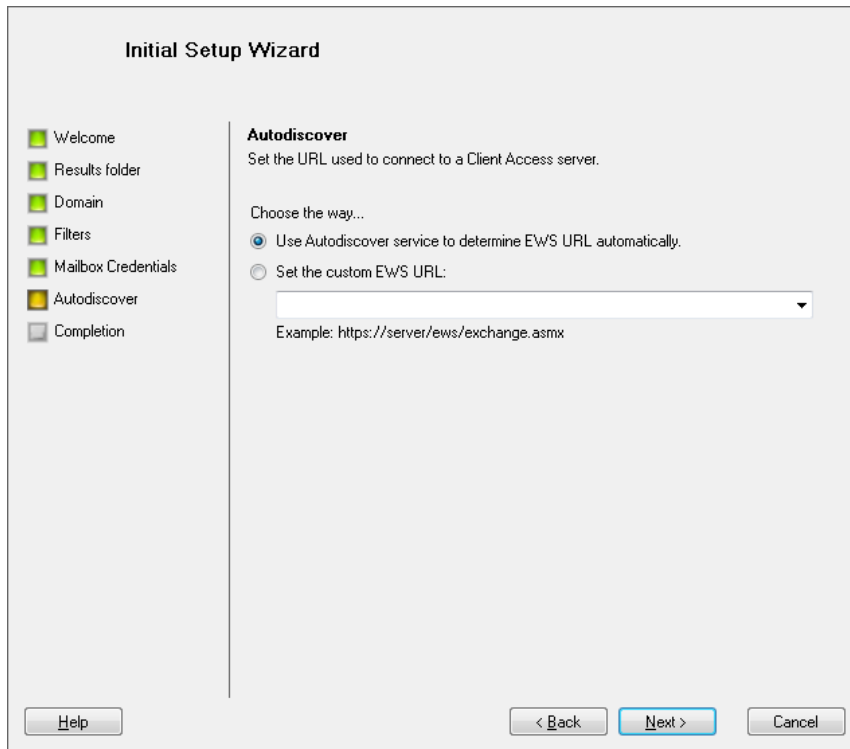
Password:

Note: you shouldn't use Administrator account because reading contents of mailboxes is explicitly denied to Administrators.

Help < Back Next > Cancel

During Step 6, you will be offered to specify EWS URL to connect CAS-server. The option should be activated only if the Autodiscover path, obtained by the computer (on which the Product is installed) differs from the target path.

Note! For Autodiscover to work correctly in case of Exchange mixed configuration (in a single Exchange Organization both Microsoft Exchange 2003 and Exchange 2007 are installed) user's mailbox, on behalf of whom the mailbox is searched, shall be located in Exchange Server 2007 storage.



During the final step, the Wizard suggests two options: launching Content Access Wizard (article 4.2.2 of the Guide) and update deployment checkup results (article 4.2 of the Guide).

4.2.2. Launching Content Access Wizard

If any failure in CAS Impersonation Rights option of Deployment State section occurs, consult this article to configure the necessary privileges.

Content Access Wizard serves for checking and issuing necessary user's account permissions to access the mailboxes.

In order to search mailboxes successfully, the user's account (on behalf of whom the search is carried out) shall have access to all mailbox databases:

- for Microsoft Exchange Server 2003 and Exchange Server 2007 – Administer Information Stores.

Note! For Autodiscover to work correctly in case of Exchange mixed configuration (in a single Exchange Organization both Microsoft Exchange 2003 and Exchange 2007 are installed) user's mailbox, on behalf of whom the mailbox is searched, shall be located in the Exchange Server 2007 storage.

- for Exchange Server 2007 SP1 - MS-Exch-EPI-May-Impersonate, MS-Exch-EPI-Impersonation for Mailbox-server и MS-Exch-EPI-Impersonation for CAS-server

- for Exchange Server 2010/2013/2016/2019 – the ApplicationImpersonation role.

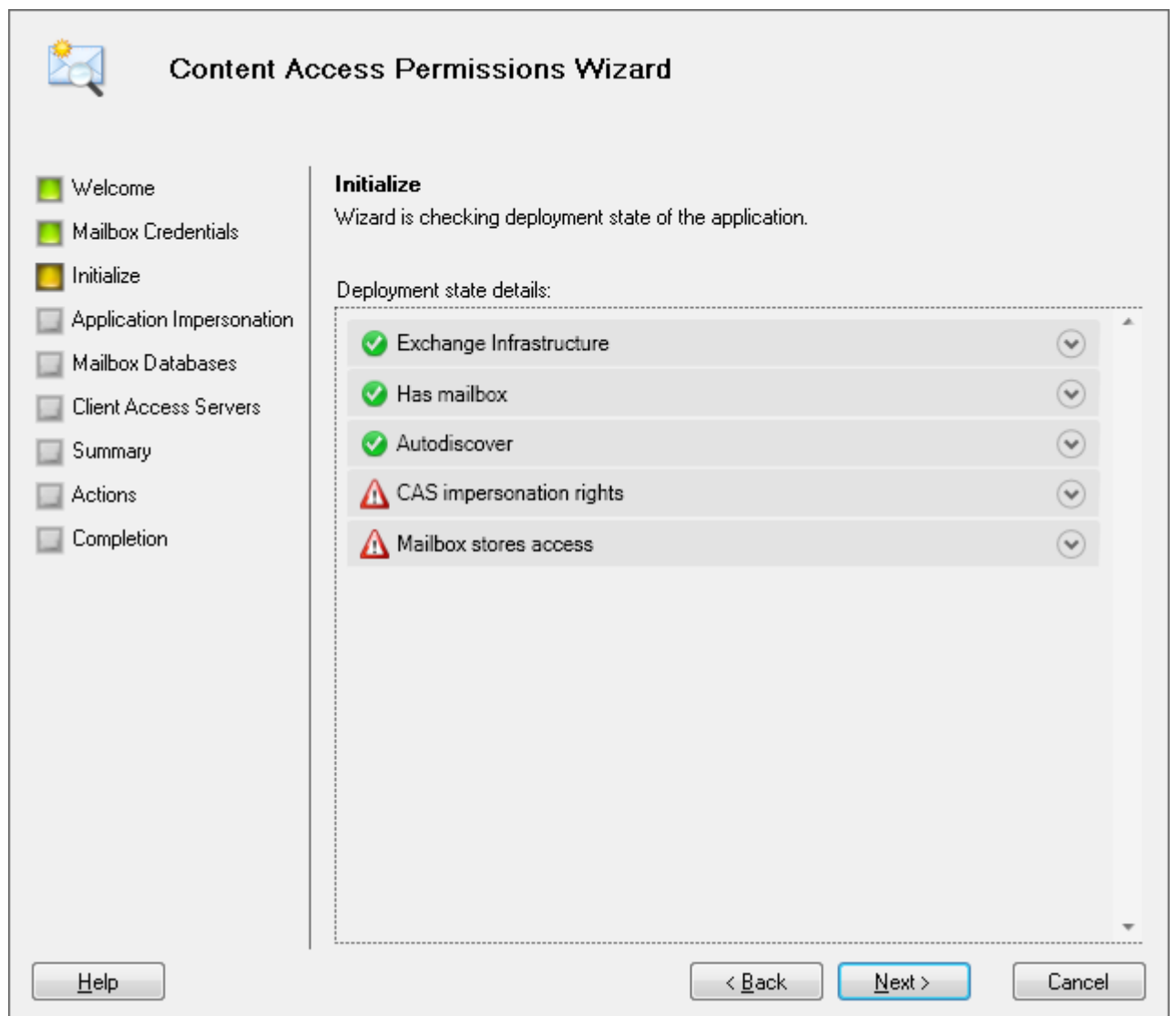
Note! For this Wizard to operate properly MAPILab Search for Exchange shall be launched under the name of the user, who is Exchange Organization Administrator for Microsoft Exchange 2007 (Exchange 2010/2013/2016/2019 – member of organization Management group), for Exchange 2003 – has the rights of domain/organization administrator.

To launch the Wizard, select the appropriate option in Actions pane or context menu.

During Step 2, the Wizard suggests specifying domain user's account you intend to use to access mailbox databases

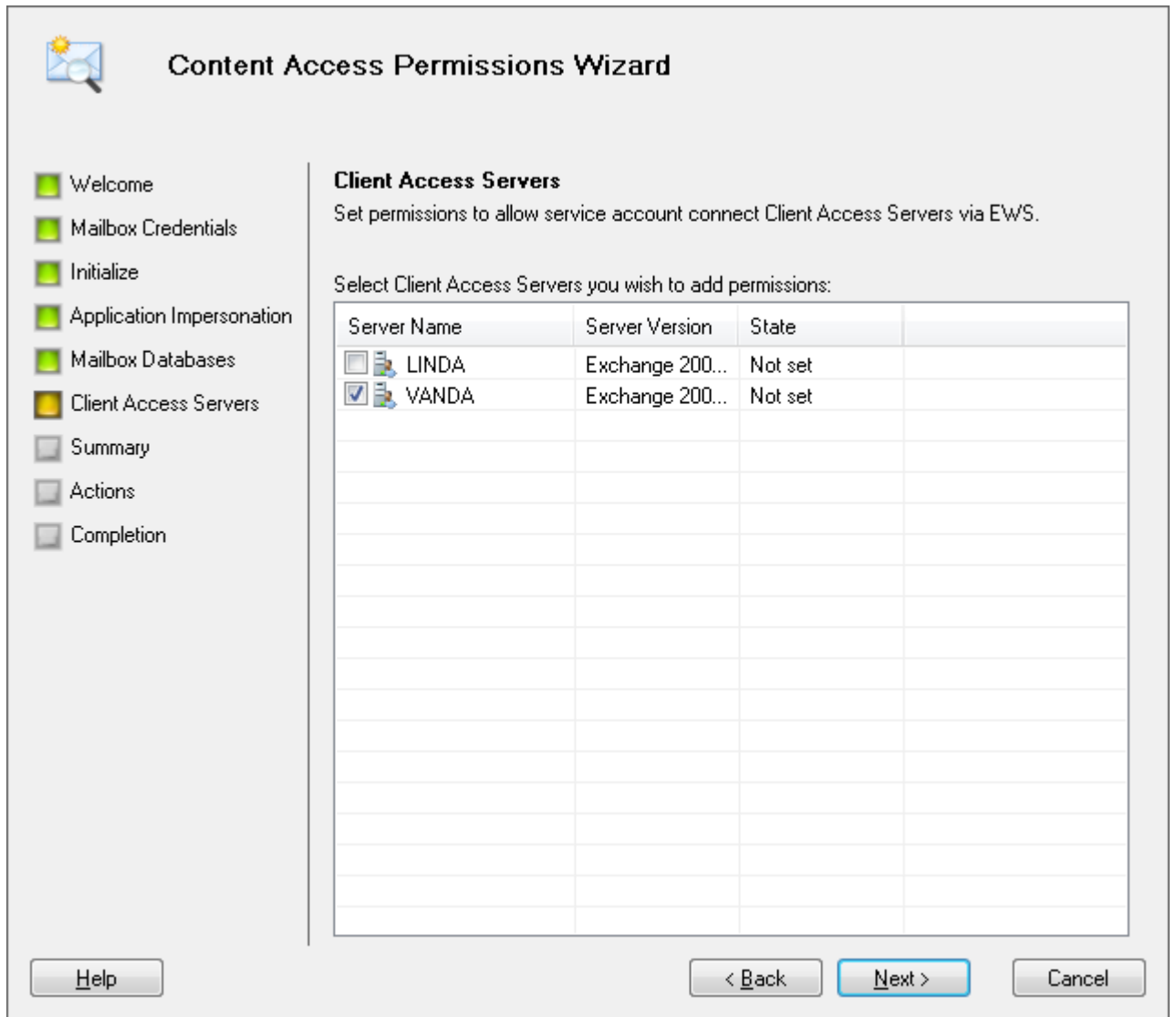
The screenshot shows the 'Content Access Permissions Wizard' window. The title bar reads 'Content Access Permissions Wizard'. On the left is a navigation pane with the following steps: Welcome (selected), Mailbox Credentials (current step), Initialize, Application Impersonation, Mailbox Databases, Client Access Servers, Summary, Actions, and Completion. The main area is titled 'Mailbox Credentials' and contains the instruction: 'Specify the credentials that will be used to read contents of mailboxes during the search.' There are two radio button options: 'Use current user credentials.' (unselected) and 'Use custom mailbox user credentials:' (selected). Below these are input fields for 'Username:' and 'Password:'. The 'Username:' field has a text input and a browse button (...). Below the 'Username:' field is an example: 'Example: DOMAIN\Username'. The 'Password:' field is a standard text input. At the bottom of the main area is a note: 'Note: you shouldn't use Administrator account because reading content of mailboxes is explicitly denied to Administrators.' At the bottom of the window are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button on the far right.

During Step 3, the Wizard provides you with the report on the presence or lack of privileges to access mailbox databases.



By selecting options with failures, you can get the details and recommendations. The failures can be removed manually or automatically by following the steps suggested by the Wizard.

During the next step, the Wizard suggests to select mailbox databases you wish to add access permissions to. Select only databases you are going to search in.



The image shows a Windows-style wizard window titled "Content Access Permissions Wizard". On the left, there is a vertical navigation pane with several steps, each with a small icon and a checkbox. The "Client Access Servers" step is highlighted with a yellow background, and its checkbox is checked. The main area of the wizard is titled "Client Access Servers" and contains the instruction: "Set permissions to allow service account connect Client Access Servers via EWS." Below this, it says "Select Client Access Servers you wish to add permissions:" followed by a table. The table has three columns: "Server Name", "Server Version", and "State". Two rows are visible: "LINDA" and "VANDA". The "VANDA" row has a checked checkbox in the first column, while the "LINDA" row has an unchecked checkbox. At the bottom of the wizard, there are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button on the far right.

Content Access Permissions Wizard

- Welcome
- Mailbox Credentials
- Initialize
- Application Impersonation
- Mailbox Databases
- Client Access Servers**
- Summary
- Actions
- Completion

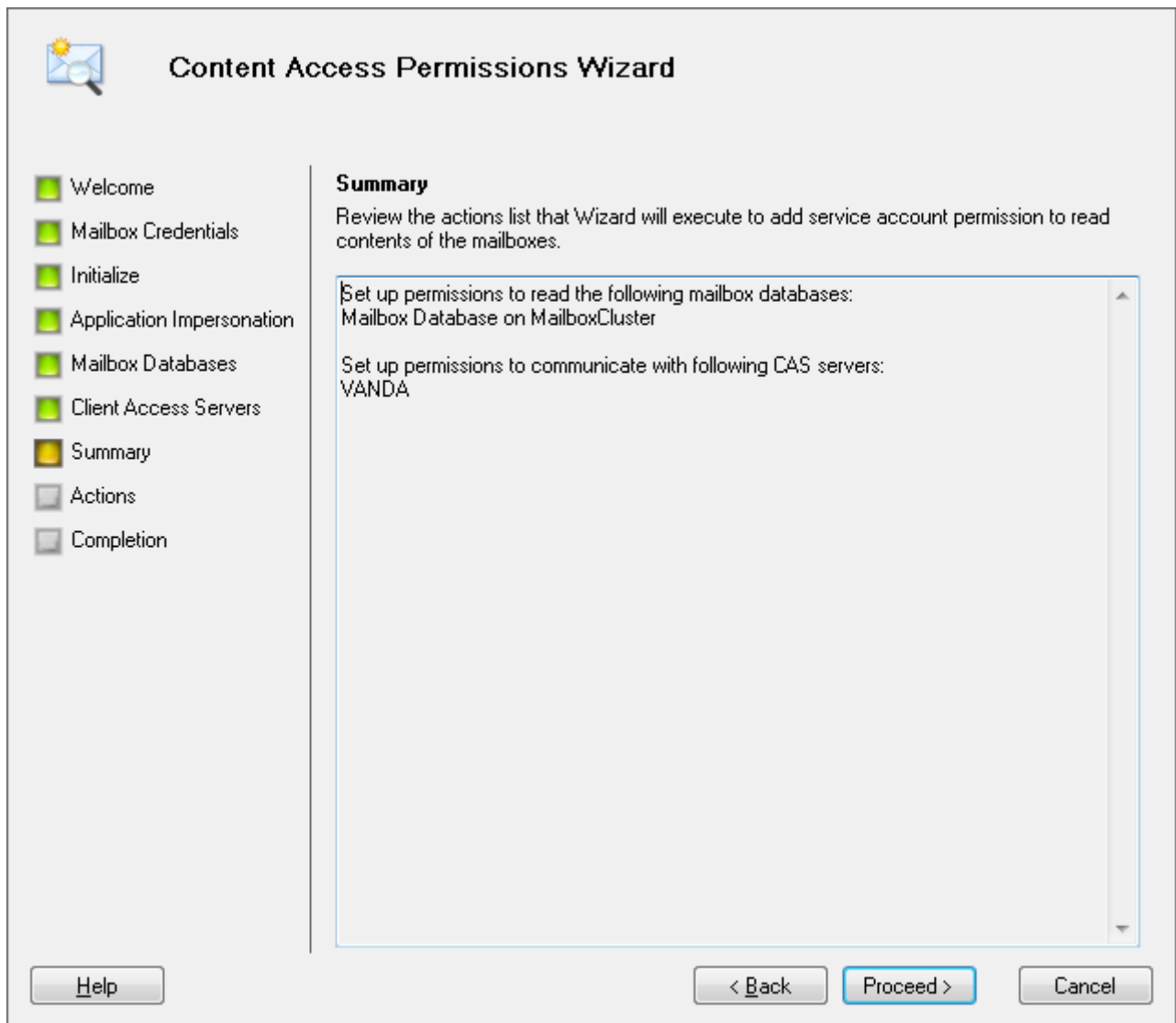
Client Access Servers
Set permissions to allow service account connect Client Access Servers via EWS.

Select Client Access Servers you wish to add permissions:

Server Name	Server Version	State
<input type="checkbox"/> LINDA	Exchange 200...	Not set
<input checked="" type="checkbox"/> VANDA	Exchange 200...	Not set

Help < Back Next > Cancel

During the next step, confirm the selected actions by clicking Proceed to execute them.



During the next step, the Wizard informs you about the action completion result.

Note! The actions executed by the Wizard can be done manually. Please read the recommendations appropriate for your version of Exchange Server in the Troubleshooting section.

4.2.3. Launching Content Indexing Wizard

If there are failures in Exchange Search Service option of Deployment State section consult this article to install the indexing services.

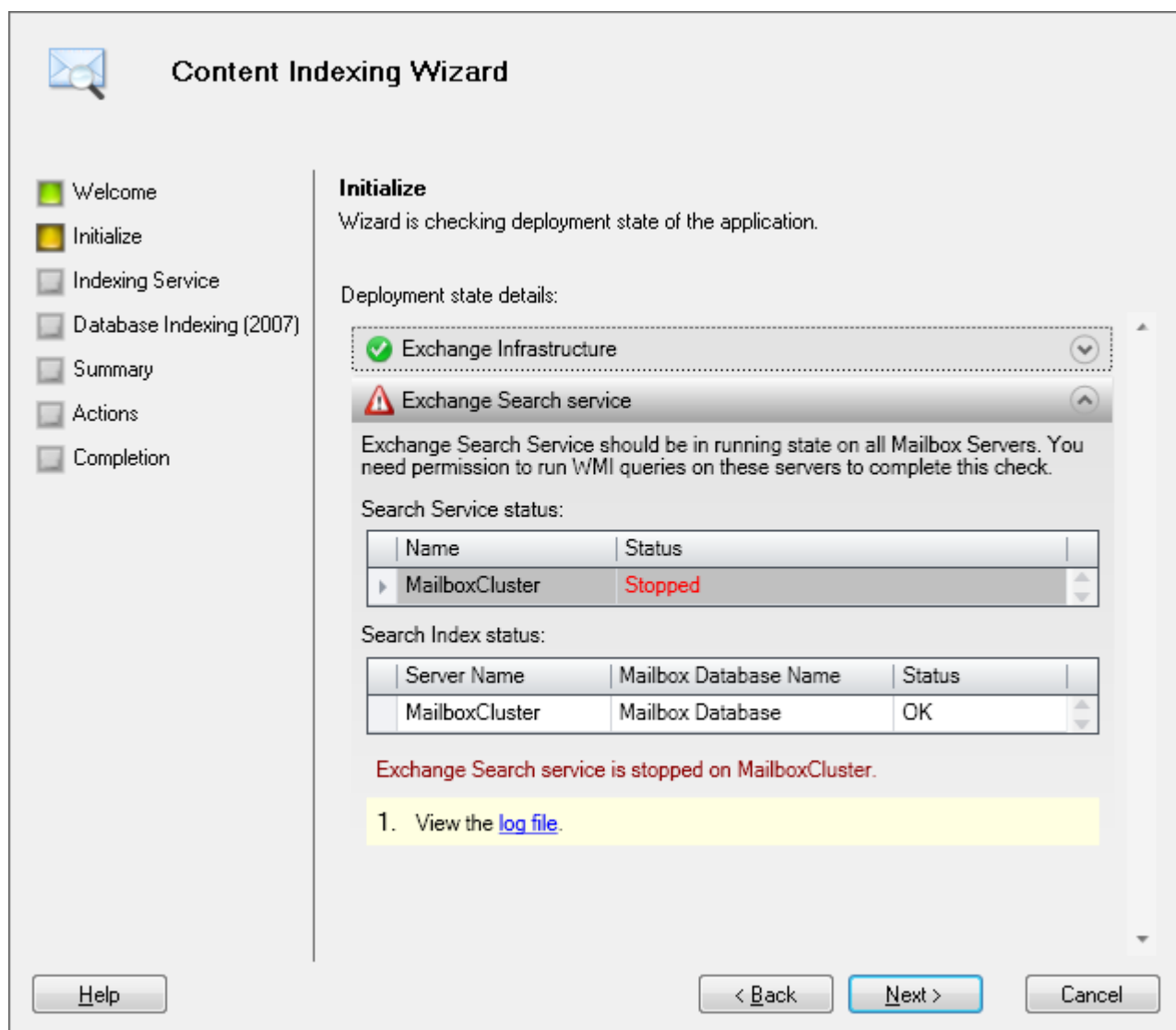
Content Indexing Wizard is designed for checking and launching the Exchange Search Indexer service of Server. For MAPILab Search for Exchange to operate properly the Exchange Search Indexer service shall be launched on all Mailbox-servers.

Note! For this Wizard to operate properly MAPILab Search for Exchange shall be launched under the name of the user, who is Exchange Organization

Administrator for Microsoft Exchange 2007, 2010, 2013, 2016 and 2019, for Exchange 2003 –has the rights of domain/organization administrator.

In order to launch the Wizard select the appropriate option in Actions pane or context menu.

During Step 2, the Wizard provides the report on search service status for all Mailbox-Servers.



By selecting options with failures you can get the details and recommendations. The faults can be fixed manually or automatically by following the steps suggested by the Wizard.

Step 3: select Mailbox-Servers you wish to enable search indexing for.



Content Indexing Wizard

- Welcome
- Initialize
- Indexing Service**
- Database Indexing (2007)
- Summary
- Actions
- Completion

Indexing Service

Start Microsoft Exchange Search Indexer service to enable content indexing on the specific server.

Select Mailbox Servers you wish to enable search indexing:

Server Name	Server Version	State	
<input checked="" type="checkbox"/> MailboxCluster	Exchange 200...	Stopped	

Help

< Back

Next >

Cancel

Step 4: select mailbox databases you wish to enable search indexing for.



Content Indexing Wizard

- Welcome
- Initialize
- Indexing Service
- Database Indexing (2007)**
- Summary
- Actions
- Completion

Database Indexing (2007)

Enable indexing of specific mailbox databases.

Select mailbox databases you wish enable content indexing:

Mailbox Database Name	Owning Server Name	Server Version	State
<input type="checkbox"/> <input checked="" type="checkbox"/> Mailbox Database	MailboxCluster	Exchange 200...	OK

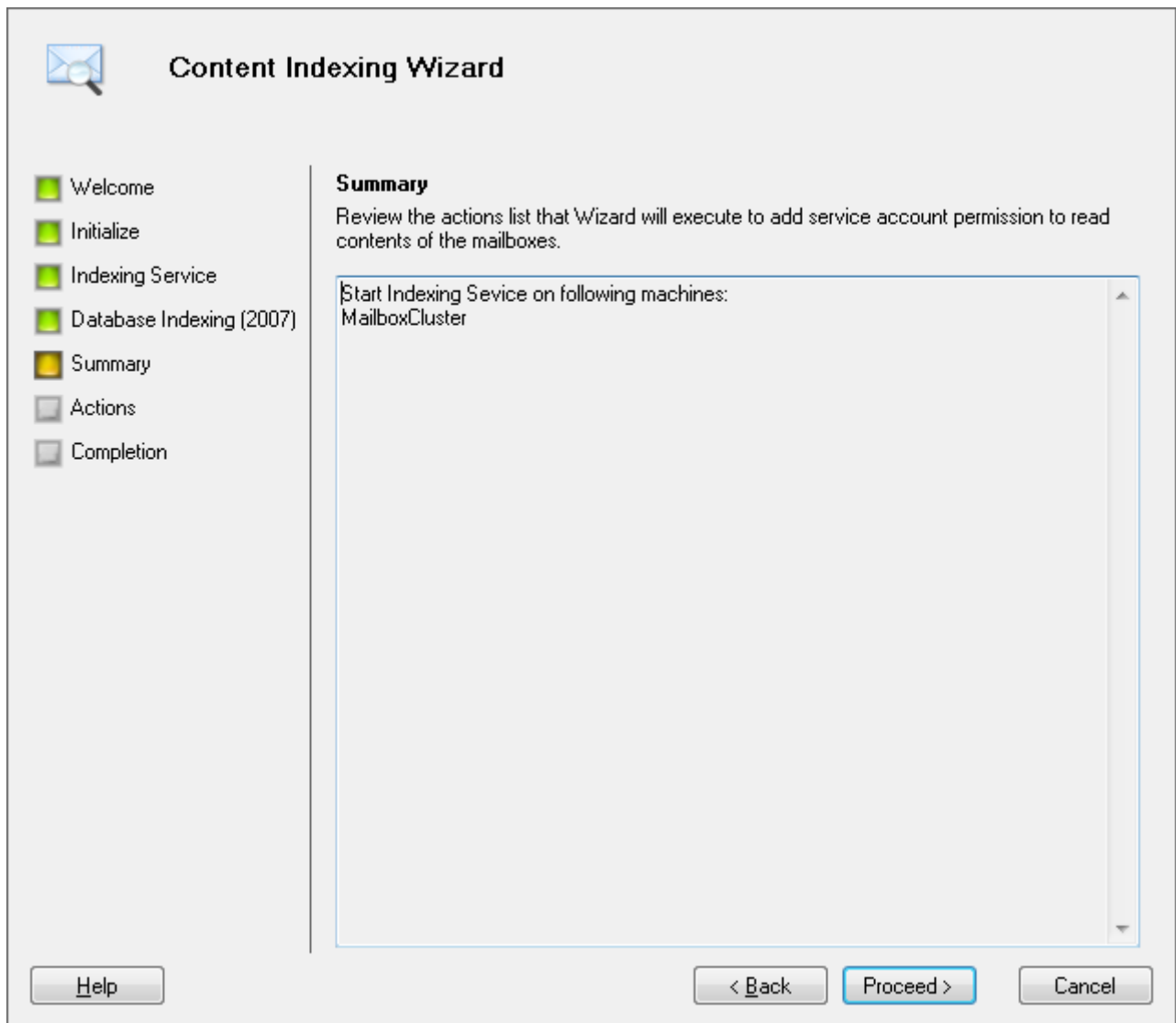
Help

< Back

Next >

Cancel

Next step: confirm the selected actions by clicking Proceed to execute them.



4.3. Updating Previous Version

Before updating previous version, read thoroughly the Guide distributed with the updating program.

Generally, you have to launch the received updating program on all the computers, on which the Product is installed, and wait for the components to be updated. All previously made configuration settings and queries will be saved.

4.4. Product Removal

All Product components can be removed via Add or Remove Programs applet (Programs and Features) in Control Panel on the computers, on which they are installed.

After Product removal some elements will remain:

- MAPILab Search for Exchange log files in the folder
"%ALLUSERSPROFILE%\Application Data\MAPILab Ltd\MAPILab Search for Exchange\";
- Search results of MAPILab Search for Exchange in the folder, specified in program settings. Default value: "%ALLUSERSPROFILE%\Application Data\MAPILab Ltd\MAPILab Search for Exchange\";

Saving of these elements allows you to update the Product by its removal and installation of the new version into the same folder. Remove the components manually, if you do not want them to remain.

4.5. Basic Product Settings

In order to access Product settings, click MAPILab Search for Exchange option in the console tree and select Properties in context menu or Actions pane.

General Tab

The General tab allows you to specify the folder for storing search results. Default value: %ALLUSERSPROFILE%\Application Data\MAPILab Ltd\MAPILab Search for Exchange\results\.

Auto-fetch messages with the same Conversation ID Option are also available on this tab. This option allows you to display the interrelated messages in search results.

Connection Tab

On this tab you may specify the parameters and user's accounts to connect Exchange-Server in case you need to use credentials of the user, different from that user on behalf of whom the console is launched.

Active Directory.

- Use the following Domain Controller instead of default – this option allows you to specify the domain controller, which provides the Product with the data on Exchange servers configuration. It is reasonable to activate the option in case of multi-domain environment or the computer, on which the Product is installed, is included into another domain or workgroup.
- Use the following credentials instead of defaults. The option should be activated in case user's account (on behalf of whom console is launched) does not possess necessary privileges in the target domain.

Mailbox Search.

- Use the following mailbox credentials instead of defaults. The option should be activated if user's account (on behalf of whom console is launched) does not possess necessary privileges to access users' mailboxes to be searched.
- Use a specific EWS URL instead of Autodiscover. The option should be activated only if Autodiscover path, received by the computer with the installed product, differs from the target path.

Note! For Autodiscover to work correctly in case of Exchange mixed configuration (in a single Exchange Organization both Microsoft Exchange 2003 and Exchange 2007 are installed) user's mailbox, on behalf of whom the mailbox is searched, shall be located in Exchange Server 2007 storage.

Threading Tab

On this tab you can specify the parameters of search query execution intensity. These settings affect the searching speed.

Execute parallel searches:

- Per server – this option determines the quantity of simultaneously executed queries on one mailbox-server.
- Per storage – this option determines the quantity of simultaneously executed queries for one mailbox database.
- Per mailbox – this option limits the quantity of simultaneously executed queries for one mailbox.

Note! Excessive increase in the quantity of parallel queries may decrease the level of mailbox-server performance. The optimal value of each parameter for your servers may be defined only experimentally.

Filters Tab

On this tab you may limit the query field.

- Mailbox Database Filter. This option allows you to select the databases, in which the search will be performed. The search is carried out only in the database that comply with the filters. If the filter is empty, the search will be performed within all databases.

- User Mailbox Filter. This option allows you to select the mailboxes, within which the search will be performed. The search is carried out only in the databases which comply with the filters. If the filter is empty, the search will be performed within all mailboxes.

5. Search Queries

5.1. Creating Queries

To create a query, select Queries in console tree and click New Query option in the context menu or Actions pane.

Query Wizard will be activated.

Step 2: specify keywords for the query. The following query logics is supported:

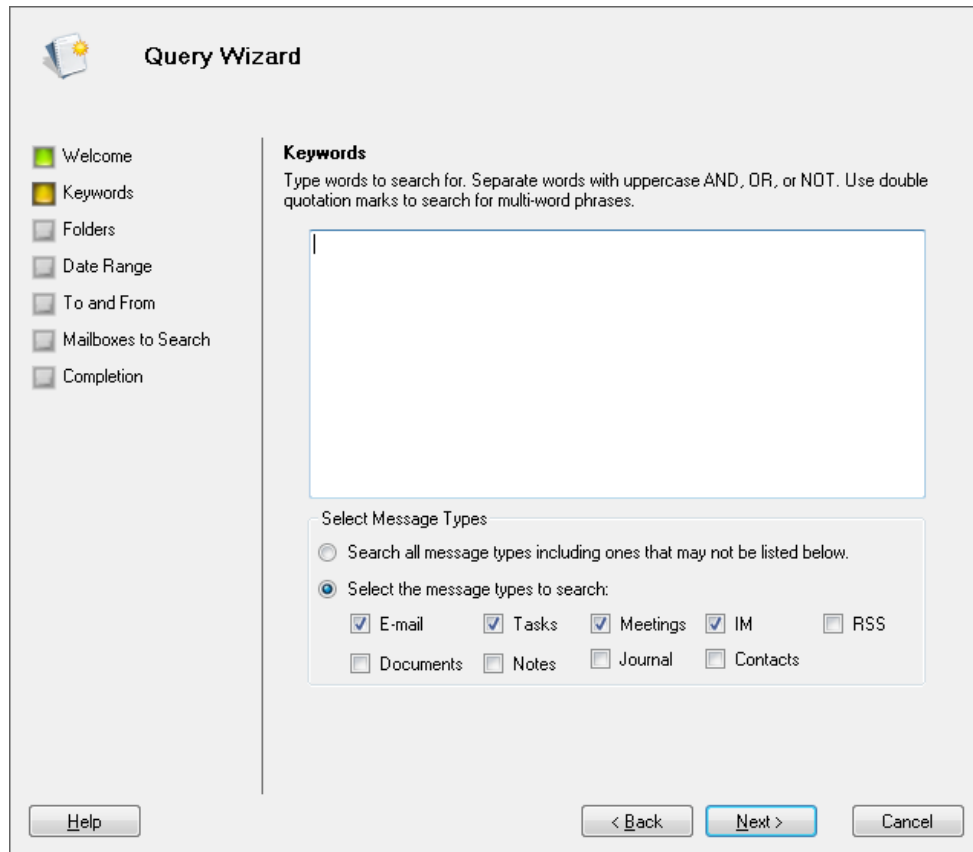
AND – logical AND. All the messages containing both words separated by AND operator will be singled out.

OR – logical OR. All the messages containing at least one of the words separated by OR operator will be singled out.

NOT – logical NOT. All the messages which do not contain any word specified with the NOT operator will be singled out.

Note! The logical operators must be written in uppercase letters.

During this step, you may also specify the types of the items to be searched for (messages, tasks, meetings etc.)



The image shows a 'Query Wizard' dialog box with a sidebar on the left and a main content area on the right. The sidebar contains a list of steps: 'Welcome' (selected), 'Keywords', 'Folders', 'Date Range', 'To and From', 'Mailboxes to Search', and 'Completion'. The main content area is titled 'Keywords' and contains a text box for entering search terms. Below the text box is a 'Select Message Types' section with two radio buttons: 'Search all message types including ones that may not be listed below.' and 'Select the message types to search:'. The second option is selected. Underneath, there are several checkboxes for message types: 'E-mail', 'Tasks', 'Meetings', 'IM', 'RSS', 'Documents', 'Notes', 'Journal', and 'Contacts'. At the bottom of the dialog are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button.

Query Wizard

- Welcome
- Keywords**
- Folders
- Date Range
- To and From
- Mailboxes to Search
- Completion

Keywords
Type words to search for. Separate words with uppercase AND, OR, or NOT. Use double quotation marks to search for multi-word phrases.

Select Message Types

Search all message types including ones that may not be listed below.

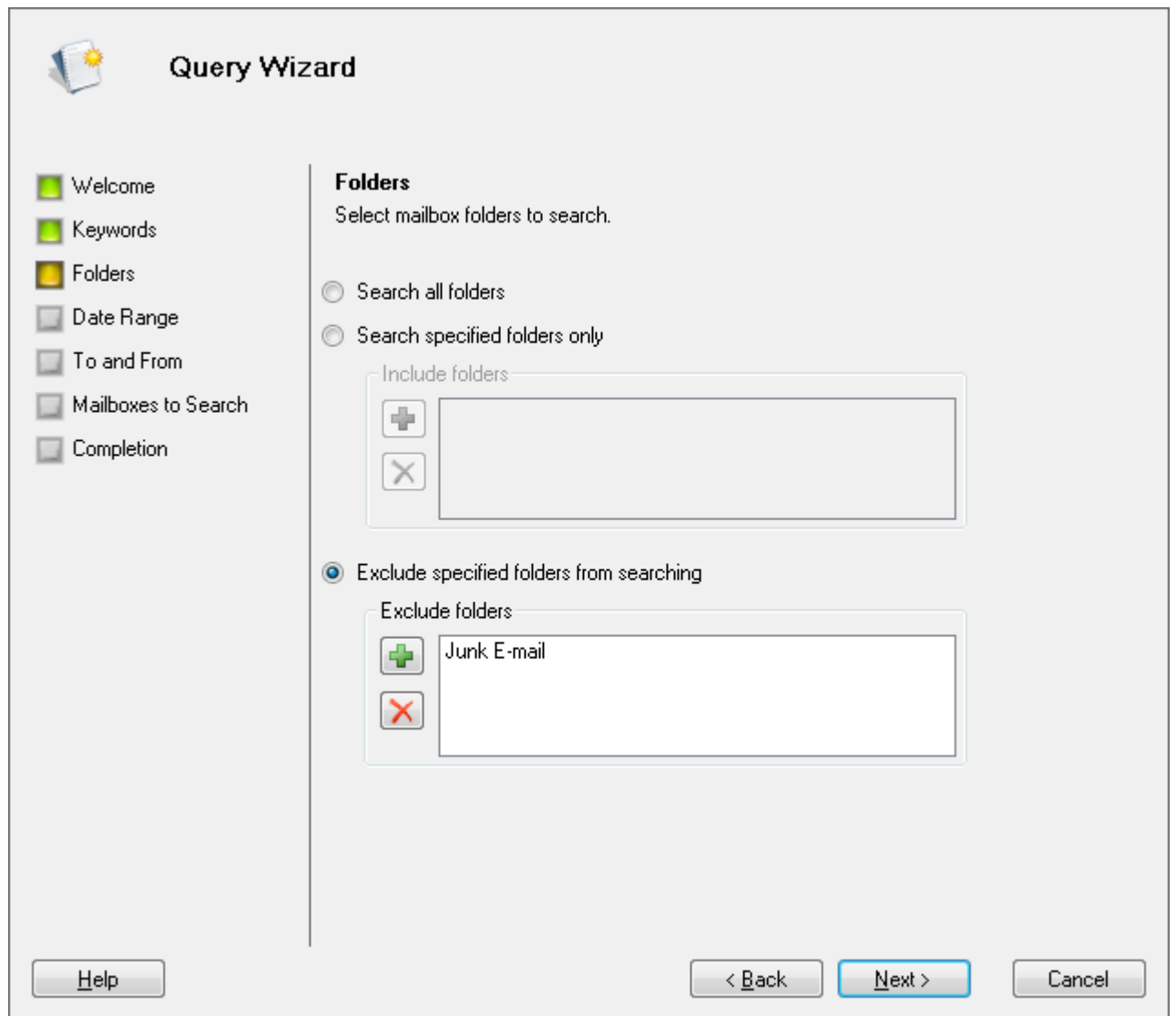
Select the message types to search:

E-mail Tasks Meetings IM RSS

Documents Notes Journal Contacts

Help < Back Next > Cancel

Next step: select the mailbox Default Folders to be searched and the folders excluded from the search.



Step 4: specify message date range for the search.

Query Wizard

- Welcome
- Keywords
- Folders
- Date Range
- To and From
- Mailboxes to Search
- Completion

Date Range
You can specify the date range for the search as follows:

Don't limit the search by date range

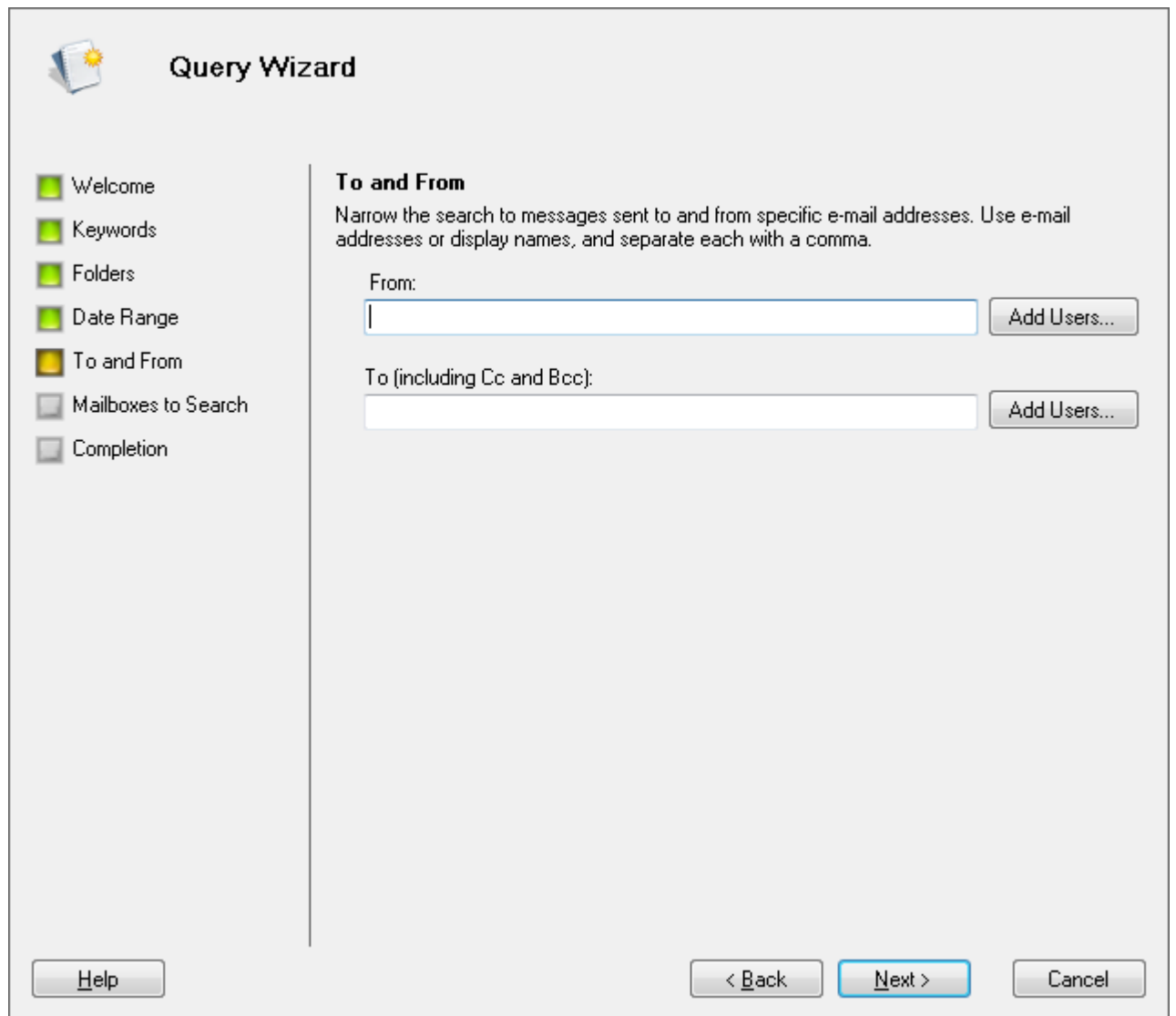
Limit the search by the following date range:

Start Date: Tuesday, March 09, 2010

End Date: Wednesday, March 09, 2011

Buttons:

Next Step: you may narrow the search to messages sent to and from specified e-mail addresses



The image shows a 'Query Wizard' dialog box with a sidebar on the left and a main content area on the right. The sidebar contains a list of steps: 'Welcome', 'Keywords', 'Folders', 'Date Range', 'To and From' (highlighted with a yellow square), 'Mailboxes to Search', and 'Completion'. The main content area is titled 'To and From' and contains the following text: 'Narrow the search to messages sent to and from specific e-mail addresses. Use e-mail addresses or display names, and separate each with a comma.' Below this text are two input fields. The first is labeled 'From:' and has an 'Add Users...' button to its right. The second is labeled 'To (including Cc and Bcc):' and also has an 'Add Users...' button to its right. At the bottom of the dialog box, there are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button on the far right.

Query Wizard

- Welcome
- Keywords
- Folders
- Date Range
- To and From**
- Mailboxes to Search
- Completion

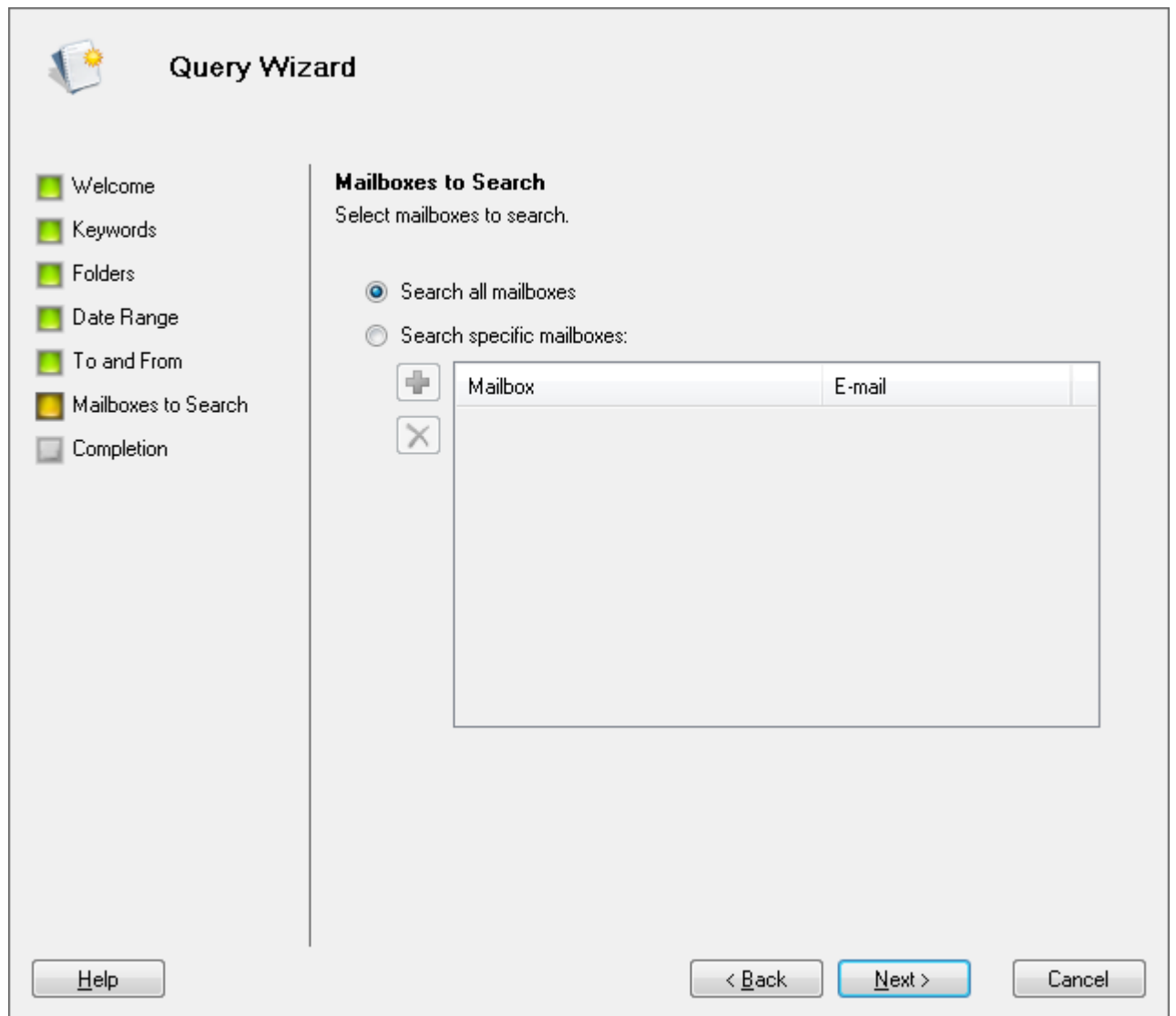
To and From

Narrow the search to messages sent to and from specific e-mail addresses. Use e-mail addresses or display names, and separate each with a comma.

From:

To (including Cc and Bcc):

Next step: select the mailboxes to search. Note that the filter specified in Product settings (see article 4.2.1 and 4.5) applies to the abovementioned mailboxes.



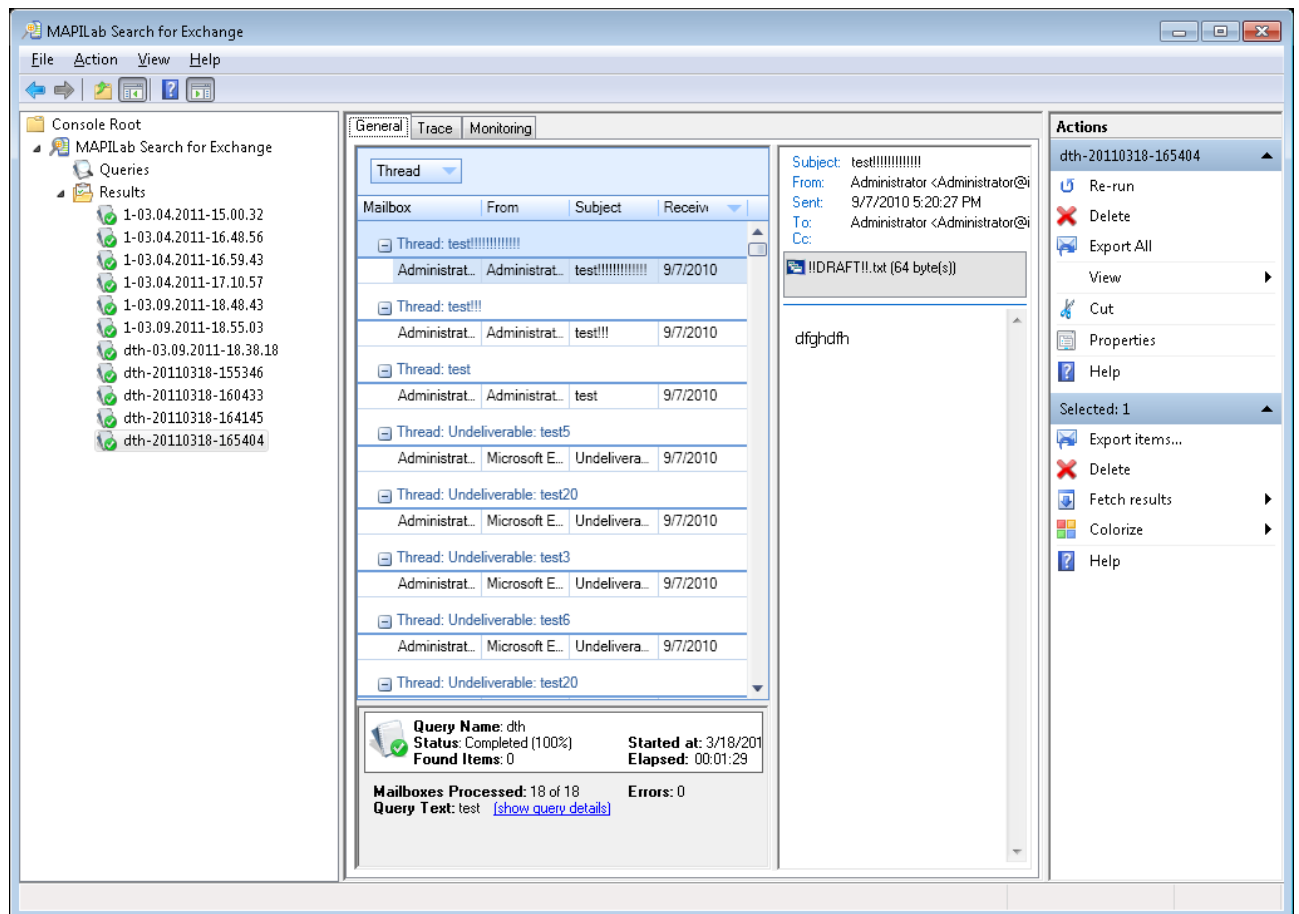
Final step: specify the query name to be saved.

5.2. Searching

To execute the search, select the saved query in the console and click Execute Query in the context menu or Actions pane. You will move to the Results console section for these query results.

General Tab.

On this query results tab, search result is displayed in the real time mode. Search completion status and execution time are also displayed.



On this tab, you can mark the important results by highlighting them with color; remove, export, and receive the interrelated messages by addressing corresponding functions in the context menu or Actions pane. Automatic selection of the interrelated messages is available (for more details see article 4.5).

Trace Tab

On this tab the detailed log of query execution is held.

Monitoring Tag

On this tab the course of query execution is displayed.

Queued tasks – tasks put into the execution queue.

You may remove waiting tasks and move the most important ones to the top of the list.

Running tasks – tasks executed currently by the mailbox-server.

In this section you may cancel current tasks.

Completed Tasks – already executed tasks.

In this section executed tasks, elapsed time and completion status are displayed. In this section search errors can be easily traced and revised in Monitoring section.

A separate task is generated for each mailbox. The number of waiting and current tasks is different, depending on the Execute parallel searches settings. On this tab you can always stop or cancel any task by calling the option from the context menu or Actions pane.

Conclusion

For more details about Product features and latest updates visit MAPILab website <http://www.mapilab.com>.