



# Multi-Access Gateway – controller

Release 23.7.R1

## Guide to Documentation

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3HE 19261 AAAB TQZZA  
Edition 01  
July 2023

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# 1 About this guide

This guide provides information about the Multi-Access Gateway - controller (MAG-c) user guides, including:

- software guides and other documents in this documentation suite
- accessing and searching the Documentation Center
- searching for specific information in a document or in multiple documents
- contact information

Use the MAG-c documentation suite in conjunction with the 7750 SR configuration guides. The 7750 SR guides describe SR OS service features that are supported by the MAG-c.



**Note:** The MAG-c software release is based on Release 20.10 of the 7750 SR OS, and inherits many, but not all, of the SR OS 20.10 features. The related SR OS configuration information is provided in the SR OS software user guides. The MAG-c software user guides describe features that are specifically supported by the MAG-c. See the *7450 ESS, 7750 SR, 7950 XRS, and VSR Documentation Suite Overview Card 20.10.R1* for more information about the SR OS user guides.

## 2 MAG-c documentation suite

This documentation suite covers the software features and functionality of the MAG-c platform. The documentation suite describes topics such as software installation, functional overview, interface description, and technical reference.

### 2.1 Software guides

The software guides describe specific SR OS software functionality for the MAG-c platform. The guides are organized into functional chapters that describe concepts, implementation flow, and the Command Line Interface (CLI) syntax and command usage. See [Accessing documentation](#) for information about accessing software guides.

Intended audience legend:

- A – network architects and designers
- B – installers
- C – network technicians, administrators, operators, and service providers

The following table describes the software guides in this documentation suite and the intended audience for each guide.

*Table 1: Software guides*

Document	Description	Intended audience		
		A	B	C
<b>Install and commission</b>				
MAG-c Installation Guide	Describes how to install the MAG-c software and defines the prerequisites and procedures to install the MAG-c elements.	—	✓	✓
MAG-c Overview Guide	Provides an overview of the Nokia Control and User Plane Separation (CUPS) solution. The Control Plane (CP) is known as the MAG-c and has the ability to control SR OS based user planes (UPs). The various UP functions include BNG, combined SGW/PGW, and 5G UPF.	✓	✓	✓
<b>Operate and maintain</b>				
MAG-c Control Plane Function Guide	Describes the Nokia Control Plane (CP) functionality and provides concepts and	✓	—	✓

Document	Description	Intended audience		
		A	B	C
	descriptions of the implementation flow, CLI syntax, and command usage for the MAG-c solution.			
<b>Command reference</b>				
MAG-c CLI Reference Guide	Describes CLI usage, all CLI commands, and the supported values and parameters for each command.	✓	✓	✓
<b>Technical reference</b>				
MAG-c PFCP Interface Description Guide	Describes the applicability of Packet Forwarding Control Protocol (PFCP) for fixed broadband access and protocol extensions for the MAG-c.	—	—	✓
MAG-c RADIUS Attributes and IU Triggers	Describes all supported RADIUS attributes and RADIUS Interim Update (IU) triggers in a searchable HTML list.	—	—	✓
MAG-c TPSDA Python 3 API	Describes the APIs used by Python developers to interact with various TPSDA protocols and applications on the MAG-c.	✓	—	✓
<b>Monitor and troubleshoot</b>				
MAG-c Log Events Reference Guide	Provides general information about log events.	—	—	✓
MAG-c Log Events Search Tool	Provides general information about log events as a searchable HTML list.	—	—	✓

## 2.2 Release Notes and Features Release Reference

The *MAG-c Release Notes* and *7750 SR and VSR BNG CUPS Features Release Reference* are not included with the MAG-c software documentation package. See [Accessing documentation](#) for information about accessing the Release Notes and the Features Release Reference.

The *7750 SR and VSR BNG CUPS Features Release Reference* gives an overview of the minimal software release needed for a specific feature. A feature can require a minimal MAG-c release only (CP), a minimal SR OS release only (UP), or in most cases a minimal release for both MAG-c and SR OS (CP and UP).

## 3 Accessing documentation

The Nokia MAG-c customer documentation can be accessed through [WebHelp](#) or through the [Nokia Documentation Center](#).

The *MAG-c Installation Guide*, the *MAG-c Release Notes*, and the *7750 SR and VSR BNG CUPS Features Release Reference* in the MAG-c documentation set are restricted (authentication is required).

The unrestricted MAG-c user guides can be accessed using a Google search. For best results, search using the term "MAG-c" followed by the current release and any applicable keywords.



**Note:** Depending on your account permissions and login status, you may not be authorized to display or download restricted guides (indicated by a lock or key symbol). If the guide remains locked after a valid login, contact a Nokia technical support representative to check your account permissions.

The MAG-c software documentation is available in the following formats:

- WebHelp HTML
- downloadable HTML library (WebHelp format)
- PDF
- zipped PDF library

## 4 Searching for information in PDFs

You can search the contents of one or more downloaded PDF files for a specific term. When searching the contents of multiple PDF files, ensure the files are located in the same folder.



**Note:** These instructions apply only to Adobe Acrobat or Adobe Reader and will not work for other readers or browsers.

### Procedure

**Step 1.** From the Adobe Acrobat or Adobe Reader main menu, choose **Advanced Search**.

The **Search** panel opens.

- To search for a specific term in the current document, click the **In the current document** button.
- To search for a specific term in multiple documents, click the **All PDF Documents in** button and select the applicable folder from the drop-down menu.



**Note:** If you downloaded a zip file of the PDF documents, you can open the Search panel by clicking the index.pdx icon in the unzipped folder. The index search of all PDF documents in the folder will be preselected.

**Step 2.** Enter the term to search for.

Select one or more of the following search criteria, if required:

- Whole words only
- Case-Sensitive
- Include Bookmarks
- Include Comments

**Step 3.** Click the **Search** button.

The search results are displayed.

Click the **+** symbol to expand the entries for each file.



## 5 Searching for information in WebHelp

You can search the contents of the WebHelp for a specific term.

You can use quotes to perform an exact search for multiple word phrases (for example, "grow flowers" will only return results if both words are found consecutively and exactly as they are typed in the search field). This type of search is known as a phrase search.

Boolean Search is supported using the following operators: and, or, not. When there are two adjacent search terms without an operator, or is used as the default search operator (for example, grow flowers is the same as grow or flowers).

The space character separates keywords (an expression such as grow flowers counts as two separate keywords).

Words composed by merging two or more words with colon (":"), minus ("-"), underline ("\_"), or dot (".") characters count as a single word.

Your search terms should contain two or more characters (stop words are ignored).

## 6 Technical support

Customer support representatives are available to assist you 24 hours a day, 7 days a week. To contact Technical Support, visit the Nokia Support portal: <https://customer.nokia.com/support/s/>.

## 7 How to give feedback on documentation

You can use the following methods to report issues with the documentation, including errors or areas that need clarification, or to provide suggestions for improvement:

- **email**

Send your feedback in an email to [documentation.feedback@nokia.com](mailto:documentation.feedback@nokia.com). Include the guide name, topic, and release.

- **online WebHelp**

In the online Webhelp click the email feedback icon next to the topic title. Use the pop-up email to provide your comments about the topic.

# Customer document and product support



## **Customer documentation**

[Customer documentation welcome page](#)



## **Technical support**

[Product support portal](#)



## **Documentation feedback**

[Customer documentation feedback](#)