#### Medical-Objects

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This article is part of the systems administration guide. You will require administration access to view the pages mentioned in this article.

Medical-Objects can be used to send and receive letters securely, and to receive pathology and radiology results.

Medical-Objects' messaging client is named Capricorn. There are two possible configurations:

- CareRight Cloud
  - In this case CareRight will communicate with a cloud-hosted Capricorn.
- CareRight Local
  - o In this case, a Windows server is required to run a local version of Capricorn
  - o Connections details depend on if you have SSL enabled on CareRight or not

The following describes common scenarios:

- If your CareRight is hosted under use.careright.com.au can use CareRight Cloud
- If you self-host CareRight, and it is accessible unrestricted from the internet, use CareRight Cloud
- If you self-host CareRight and it is not accessible from the internet, but you are willing to allow connections from specific IP addresses belonging to Medical-Objects, use CareRight Cloud
- Otherwise use CareRight Local

If you are not sure which is applicable to you, contact your IT department or Clintel support.

#### Details to give Medical-Objects

When contacting Medical-Objects to setup a new site, they will require the following information:

- 1. If the CareRight installation is cloud hosted or local
- 2. The hostname that Medical-Objects will use to to connect to CareRight.
  - a. For non-SSL sites, see the additional notes below

Medical-Objects will provide you with:

- 1. Site name
- 2. Capricorn endpoint URL
- 3. Capricorn delivery report URL
- 4. HD generated by Medical-Objects for practice
- 5. Configuration details for a FHIR Provider Directory

## CareRight Configuration - Sending Certificate

A certificate is required to send secure messages via Medical-Objects

### **Hosted CareRight**

If you do not have direct access to CareRight's database (eg, cloud hosted CareRight), Clintel will upload a vendor sending certificate for you.

### **Self-Hosted CareRight**

If you self-host CareRight, or have direct access to CareRight's database, you will need to create your own certificate. This can be done using the Medical-Objects Client Certificate Request Utility. For details, see here: https://kb.medical-objects.com.au/display/PUB/Certificate+Wizard+Walkthrough

When using the Certificate Request Utility, set the CN of the certificate to the following, replacing "XXX" with your site name Vendor: Clintel - CareRight - XXX

When you receive the returned certificate from Medical-Objects, use the tool to export the public and private keys to a P12 file. Make a note of the passphrase used when exporting to P12.

To upload the P12 certificate to CareRight:

- 1. Navigate to: Administration > System > Certificates
- 2. Press the New button

Field	Description	Example
Name	Your name for the certificate	Medical-Objects Sending Cert
PKCS #12	Select the P12 file generated previously	
Password	Enter the password you used when	
	creating the P12 file	

After saving, click **Show** to view the certificate details. The screen should display "Valid Certificate" and show the expiry date ("Not After") as well as technical details contained in the certificate.

# CareRight Configuration - Medical-Objects Endpoint

Each Capricorn system must be configured in CareRight as a Medical-Objects Endpoint. To create one:

- 1. Navigate to: Administration > Secure Messaging > Medical-Objects Endpoints
- 2. Click New

Field	Description	Example
NameSpace ID	The first part of the HD provided by	
	Medical-Objects (up to the first "^"). Also	Clintel Clinic
	referred to as the "Site Name".	
Universal ID	The second part of the HD provided by	
	Medical-Objects (between the 2 "^").	AE5CF8E3-6C94-4BC4-8E46-
	This will be 36 character string made up	327F47000000
	of letters, numbers and hyphens.	

Field	Description	Example
URL	The Capricorn endpoint URL provided by Medical-Objects	https://hd-ae5cf8e3-6c94-4bc4-8e46- 327f47000000-guid.moc.medical- objects.com.au/
Delivery Report URL	don't enter it, the CareRight UI will not	https://hd-ae5cf8e3-6c94-4bc4-8e46- 327f47000000-guid.mocloud.com.au/
Certificate	For hosted installs, select "Vendor Clintel Live (Medical-Objects Sending)".  For self-hosted installs, select the certificate you uploaded previously.	
Default Location	Select the location that incoming correspondence will be attached to.	Clintel Clinic
Enabled	Tick this to enabled the endpoint	Yes
Default	Tick this to set the endpoint as default (this must be ticked for one endpoint to receive messages)	Yes

After creation, click **Test** to perform a connectivity test. This checks connectivity for sending messages. If there is a network or certificate problem, an error will be displayed. If successful, the message shown should include "200 OK".

#### Capricorn Setup

There are 3 possible configurations, depending on if your CareRight is cloud hosted, or have a local installation with or without SSL.

#### **CareRight Cloud**

No additional steps are required. The two cloud systems will communicate with each other.

## CareRight Local (with SSL)

The windows server running Capricorn must be able to securely connect to CareRight over HTTPS. If you provide your own CA, make sure it is installed on the Windows server as a trusted root certificate.

## CareRight Local (without SSL)

In this case additional steps are required to ensure Capricorn can connect securely with CareRight. Please contact Clintel support for more information.

## **Provider Directory**

Medical-Objects provides a provider directory (also known as a FHIR directory). Connection details will be provided by Medical-Objects when signing up and using CareRight.

For details, see Provider Directory. When selecting the type of server, choose "Medical-Objects PD".

When a letter is being written to a recipient linked to a Medical-Objects provider directory, "Medical-Objects" will be available and the default as the delivery option.

## **Provider Directory Certificate**

A certificate must be uploaded to CareRight for it to have access to the Medical-Objects provider directory.

#### Hosted CareRight

If you do not have direct access to CareRight's database (eg, cloud hosted CareRight), Clintel will upload a vendor sending certificate for you.

#### Self-Hosted CareRight

If you self-host CareRight, or have direct access to CareRight's database, you will need to create your own certificate. This can be done using the Medical-Objects Client Certificate Request Utility. For details, see here: https://kb.medical-objects.com.au/display/PUB/Certificate+Wizard+Walkthrough

When using the Certificate Request Utility, set the CN of the certificate to the following, replacing "XXX" with your site name Production Clintel FHIR System - XXX

After receiving the response, export a P12 version of the certificate and upload to CareRight.

# **CareRight Configuration - Provider Directory**

To configure the provider directory:

- 1. Navigate to: Administration > Secure Messaging > Provider Directories
- 2. Click New

Field	Description	Example
FHIR Server Type	Controls vendor-specific behaviour of the Provider Directory	Medical-Objects PD
Base URI	URL of the provider directory	https://hd-2f07aa4c-9bb3-4845-9804- 85013f666f4c- guid.mocloud.com.au/rest/fhir
Certificate	For hosted installs, select "Production Clintel FHIR System (Medical-Objects)".  For self-hosted installs, select the certificate you uploaded previously.	
Enabled	Enables the provider directory	true
Default	Sets the provider directory as the default	true

#### **Delivery Report**

Medical-Objects provides an on-line delivery report which can be used to view the overall state of sent and received

messages.

Medical Objects will provide a certificate that needs to be loaded into the web browser that will access CareRight.

Once the certificate is loaded the CareRight Medical-Objects Delivery Report link will be active.

You can view to the delivery report from CareRight by navigating: **Dashboard > Correspondence** and then click **Medical-Objects Delivery Report**.

## Multiple Endpoints

It is possible to configure multiple endpoints. The main reason to do this is if you want separate delivery reports (eg, by location, region or state). For simplicity Clintel recommends using a single endpoint.

Each endpoint requires a separate Medical-Objects configuration (ie, with a different HD, NameSpace ID and Universal ID).

To change which endpoint is used when sending a letter for a specific location:

- 1. Navigate to Administration > Locations
- 2. Select the location and click Edit
- 3. Select the new endpoint in the field Correspondence > Override Medical-Objects Endpoint
- 4. Click Update Location

Incoming messages will use the metadata in the message to associate with the correct endpoint, which affects the default location of the correspondence.