1 Creating additional internal/external routes

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Contents of this document

This document describes how to use additional internal routes to enable access from one network to another.

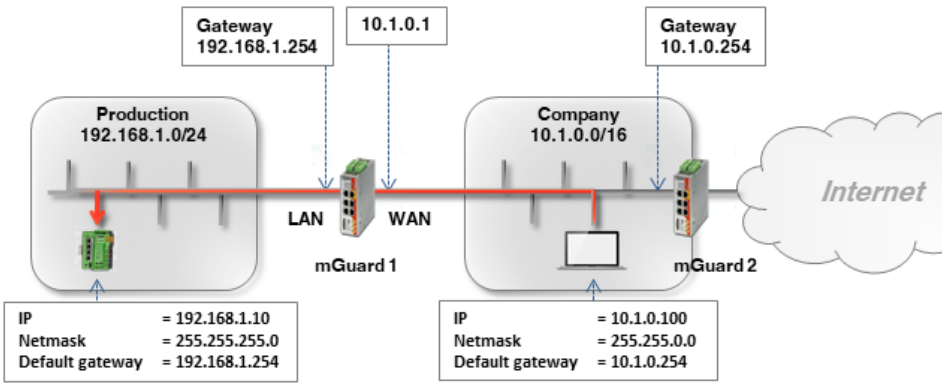
Use of additional external routes is along the same lines as internal routes and will not be described separately.

1.1 Introduction

If packets in the internal network of the gateway (*mGuard 2*) are to be sent to an IP address in another network (external or DMZ), the gateway must know which router or gateway it should use to forward these packets. *Additional Internal Routes* can therefore be specified in the gateway (*mGuard 2*). (Further options are described in Section 1 and 1.)

1.2 Example

The web interface of a machine controller (PLC) in the production network is to be accessed from the company network.



The PLC (192.168.1.10) and the office computer (10.1.0.100) are not in the same network. The office computer sends packets intended for the PLC to its default gateway (*mGuard 2*: 10.1.0.254).

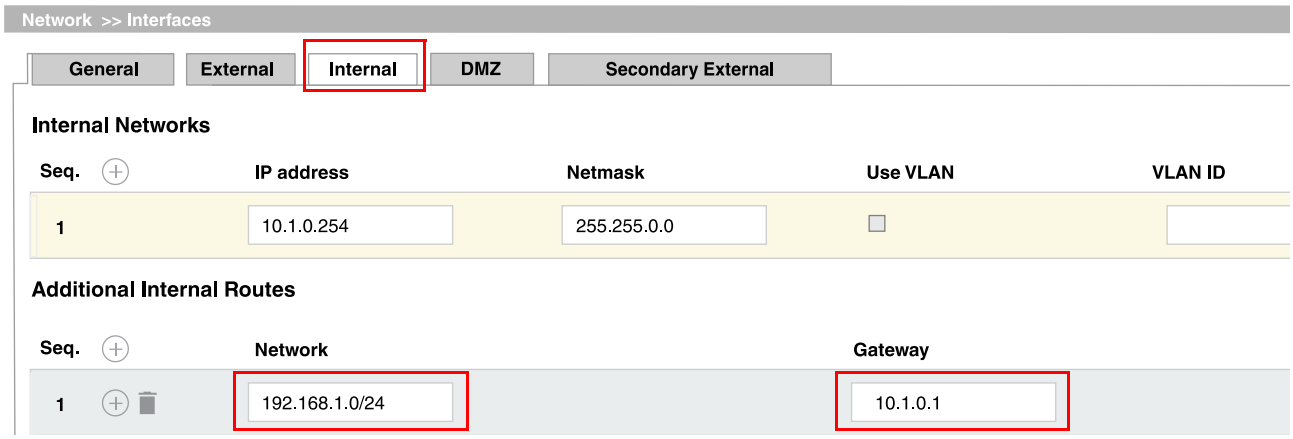
This gateway now needs to know where it should forward the packet to. This is specified by adding additional internal routes.

An additional route must be configured on the default gateway (*mGuard 2*: 10.1.0.254) of the office computer. This route specifies *mGuard 1* (10.1.0.1) as gateway and the production network (192.168.1.0.0/24) as destination network. *mGuard 1* acts as the router that connects the two networks.

1.3 Procedure

If the default gateway in the company network is an mGuard device (*mGuard 2* in the *Router* network mode), proceed as follows:

1. Log into the default gateway web interface (*mGuard 2*) in the company network (LAN interface at 10.1.0.254).
2. Go to **Network >> Interfaces >> Internal**.
3. Create an **additional internal route** to the production network (network: 192.168.1.0/24 via gateway 10.1.0.1):



4. Clients in the company network send packets intended for the network 192.168.1.0/24 via their standard gateway (*mGuard 2*) to *mGuard 1*.

Result

Clients in the company network can reach the PLC in the production network via its real IP address:

– Web browser: http://192.168.1.10
– Ping: 192.168.1.10

The incoming rules of the *mGuard 1* firewall must allow corresponding requests.

Advantages

– The PLC can be reached directly via its real IP address.
– There is no need to change the network configuration of the office computer and other clients in the company network.

Disadvantages

– Additional routes have to be configured on the gateway.