MGuard secure cloud public

Quick Guide

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Innominate Security Technologies AG

Table of Contents

| 1 | Intro | oduction | 1 |
|---|--|--|--|
| | 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 | Addresses Browser compatibility Supported languages mGuard compatibility Important information Available editions & tariffs Operating elements Recommended screen resolution | 2 2 3 3 4 5 5 |
| 2 | Sigr | n up | 6 |
| 3 | Log | in for the first time | 8 |
| | 3.1 3.2 3.3 3.4 3.5 | Password forgotten? Online check via IP check IP check with JavaScript IP check via Java applet Autodetect mechanism | 9 9 9 . 10 . 10 |
| 4 | Initi | al steps as an administrator | .11 |
| | 4.1 4.2 4.3 | Service Workstations and Service Targets (Machines)Configure a VPN connection (VPN Builder)4.2.1 Preconditions4.2.2 Build a VPN configuration4.2.3 Download the VPN configuration4.2.4 Upload the VPN configuration to the mGuard4.2.5 Upload the VPN configuration to the software VPN client4.2.6 Checking the VPN connections using the status indicatorsUser administration4.3.1 Add new user4.3.2 Edit user / Change role4.3.3 Delete user4.3.4 Permissions4.3.5 Assigning access permissions to a user (premium feature)4.3.6 Edit / delete access permissions of a user (premium feature) | . 11 . 13 . 13 . 14 . 16 . 17 . 19 . 23 . 24 . 24 . 24 . 24 . 24 . 25 . 26 |
| | 4.4 | Access permissions (premium feature)4.4.1 Adding new permission groups4.4.2 Deleting permission groups4.4.3 Adding new access rules to permission groups4.4.4 Revoking access rules from permission groups | . 27 . 27 . 27 . 27 . 28 . 28 |
| 5 | Firs | t steps as a user | .29 |
| | 5.1 5.2 5.3 5.4 | Login to the mGuard Secure Cloud public (Sign in) Check the online status of the service workstation Choose Operator/Location Connecting the service workstation to the machine | . 29 . 30 . 30 . 30 |

| 6 | Tari | iff upgrade | 33 |
|----|--|--|--|
| | 6.1 | Request additional packages (mGuard Secure Cloud public Shop) | 34 |
| 7 | Mer | nu items | 35 |
| | 7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 | 'Service Targets (Machines)' menu item. 'Machines' menu item. 'Administration' menu item. 'Logbook' menu item. 'Preferences' menu Item. 'Contact' link. 'Language' link. 'Help & Support' link. | 35 35 36 36 37 37 37 |
| 8 | Fre | quently Asked Questions (FAQs) | 38 |
| 9 | Kno | own limitations | 11 |
| 10 | Ser | vice for mGuard Secure Cloud customers | 11 |
| 11 | Pub | olisher | 41 |

MGuard secure cloud public

1 Introduction

The mGuard Secure Cloud public is a cloud-based VPN infrastructure for industrial remote services, which does not require the installation of any additional software. It only requires a SSL-capable web browser. Any device such as desktop computers, notebooks, netbooks and tablets can be used to access the mGuard Secure Cloud public and your service targets.



Figure 1.1: mGuard Secure Cloud public // Architecture

1.1 Addresses

Customers can reach their mGuard Secure Cloud public instance using the 'Choose country' selector in the upper right corner.

German customers can reach their mGuard Secure Cloud public instance using the 'Choose country' link via the following web address (data center in Berlin, Germany): <u>https://de.cloud.mguard.com/</u>

Customers in the USA, Canada, Central and South America can access a separate physical mGuard Secure Cloud public instance via the following web address (computer center in Harrisburg, PA, USA): <a href="https://www.https://wwww.https://www.https://wwww.https://www.https://www.http

Italian customers reach their mGuard Secure Cloud public instance via the following web address (data center in Berlin, Germany): <u>https://it.cloud.mguard.com/</u>

Customers from Austria, Belgium, Switzerland, Denmark, Spain, Finland, France, UK, the Netherlands, Norway, and Sweden get their own virtual mGuard Secure Cloud instance, which is physically operated in a professional data center in Berlin, Germany.

All other customers should select 'others | not listed'.

1.2 Browser compatibility

We recommend the use of secure browsers such as <u>Firefox</u> (version 17.0 or later), Google <u>Chrome</u> (version 28.0 or later) or Apple <u>Safari</u> (version 5.1.7 or later). The use of cookies must be enabled in the browser (see FAQs, Section <u>8</u>).

Please note: the use of Internet Explorer 8 lead to an increased security risk and the use of Internet Explorer 9 offer a poorer user experience. We therefore recommend the use of one of the above mentioned browser or – if this is not possible - an upgrade to Internet Explorer 10 or higher.

1.3 Supported languages

The mGuard Secure Cloud public User Interface is available in 3 different languages:

- English
- German
- Italian

Your preferred language can be switched with the help of the language selector. The language selector is always available in the upper right corner of the user interface.

| Hello Guest! Sign in Sign | up |
|-------------------------------|--|
| | Language: English Choose country Contact |
| | DE Deutsch EN English |

Figure 1.2: mGuard Secure Cloud public // Language selector

1.4 mGuard compatibility

Please note that all the mGuard devices connected to the mGuard Secure Cloud public must have firmware Version 7.5 or later. The latest mGuard firmware can be downloaded at <u>http://www.innominate.com/en/downloads/firmware</u>.

1.5 Important information

If the service workstation is connected to the Internet via a proxy server (Sections <u>3.2</u> and <u>3.3</u>), please ensure that a relevant exception for the mGuard Secure Cloud is entered in the settings for the browser and/or operating system so that the necessary IP check (Sections <u>3.2</u>) can be performed. Otherwise the status indicator for the service workstation does not change to online status (green) (Section <u>4.2.6</u>):

Internet Explorer 10 / Windows:

Tools (Alt-X) > Internet options > 'Connections' tab > Local Area Network (LAN) settings > LAN settings > Proxy server > Use a proxy server for your LAN > Exceptions > 'ip-check.de.mguard.com' or 'ip-check.us.mguard.com'

Firefox:

Tools > Options > Advanced > Network > Connection > Settings > Manual proxy configuration > No proxy for > 'ip-check.de.mguard.com' or 'ip-check.us.mguard.com'

Chrome / Windows:

Settings > Options > Under the Hood > Network > Change proxy settings > 'Connections' tab > Settings for Local Area Network > LAN settings > Proxy server > Use proxy server for LAN > Exceptions > 'ip-check.de.mguard.com'

If it is not possible to configure the relevant proxy exception, the IP check can also be performed using a Java applet (Section <u>3.4</u>).

1.6 Available editions & tariffs

For customers in the EU, the mGuard Secure Cloud public is available in the following editions:

| mGuard Secure Cloud public Edition | Description |
|-------------------------------------|---|
| Evaluation Edition | Max. runtime: 30 days |
| | Number of users: unlimited |
| (features equal to Premium Edition) | Number of machines: 1 |
| | Number of concurrent user sessions: 1 |
| | Transfer volume per user session in GB/month: 1 |
| | Guaranteed bandwidth per user session in Mbit/s: none |
| | Guaranteed yearly availability: none |
| | Permission model: enhanced |
| | Hotline: phone, e-mail |

| mGuard Secure Cloud public Edition | Description | | |
|------------------------------------|---|--|--|
| Premium Edition ★ | Min. runtime: 12 months | | |
| | Number of users: unlimited | | |
| | Number of machines: min. 5 (expandable) | | |
| | Number of concurrent user sessions: 1 (expandable) | | |
| | Transfer volume per user session in GB/month: unlimited | | |
| | Guaranteed bandwidth per user session in Mbit/s: 1 | | |
| | Guaranteed yearly availability: 98% | | |
| | Permission model: enhanced | | |
| | Hotline: phone, e-mail | | |
| | | | |
| | Consists of 1 x SC-101010 and 1 x SC-101020 | | |
| additional bookable packages | | | |
| Order number | Description | | |
| SC-101010 | mGuard Secure Cloud public Premium Seat | | |
| | 1 additional concurrent user session | | |
| SC-101020 | mGuard Secure Cloud public Premium Machine Package | | |
| | 5 additional machine connections | | |

| mGuard Secure Cloud public Edition | Description | | | |
|------------------------------------|---|--|--|--|
| Basic Edition | Number of users: unlimited | | | |
| | Number of machines: unlimited | | | |
| | Number of concurrent user sessions: 1 | | | |
| | Transfer volume per user session in GB/month: 1 | | | |
| | Guaranteed bandwidth per user session in Mbit/s: none | | | |
| | Guaranteed yearly availability: none | | | |
| | Permission model: standard | | | |
| | Hotline: e-mail | | | |
| additional bookable packages | | | | |
| Order number | Description | | | |
| SC-100010 | mGuard Secure Cloud public Premium Seat | | | |
| | 1 additional concurrent user session | | | |

1.7 Operating elements

For the navigation via the mGuard Secure Cloud public user interface (UI), the following color coding is used:

mGuard red: Active menu items and tabs.



Hint: Explanatory text on the user interface can be faded out by clicking on the Icon **X**. Click on the text 'Show Hint...' to show the hint text again

Blue:

Primary and secondary control elements (e.g., icons, buttons)



Green: 'online'and 'Start' status indicators

- Red: 'offline' and 'Stop' status indicators
- ★ : The star icon tags premium features

1.8 Recommended screen resolution

The mGuard Secure Cloud public Web User Interface (UI) should be used with a minimum screen resolution of 1200 x 800 pixel.



Figure 1.3: mGuard Secure Cloud public // Web UI

2 Sign up

```
Role: Master Admin
```

Before you can log on to and use the mGuard Secure Cloud public, you have to register using the free sign up process.

Process steps

- 1) Click 'Sign in | Sign up' at the top of the cloud UI at the login page of the mGuard Secure Cloud public.
- Click the button 'Sign up' in the login panel that appears.
 Or: Click the framed link 'SIGN UP' in the center of the login page.
- 3) Complete the registration form.
- 4) Enter the destination network (machine network) that you want to reach via VPN connection.
- 5) Accept the Evaluation License Agreement due to a click on the checkbox.
- 6) Enter the security code (captcha).
- 7) Click on the button 'OK'.

After receiving your request, a 'tenant' will be created. Due to our careful verification, this process may take several hours.

Following successful registration, the user specified as the 'Masteradmin' in the registration form receives the login data sent to the specified e-mail address.

| Up to this point, mGuard VPNs were secure. But now, they are secure AND easy to use. Convince yourself by testing us: Sign in. Select. Connect. | Sign in Account: User: Password: | | | Sign up No mGuard Secure Cloud user yet? Sign up now for free! Your benefits as a registered user: • Free testing. Free use. |
|--|---|--------------------------------|-----------|--|
| you connect. we protect. copyright © 2011-2015 Innominate Security Technologies AG | Sign in | Stay signed in: Password fo | orgotten? | Build and manage VPNs easily Start your service connections with only Sign up |
| | p u | | | |
| CLOUD-BASED INSTAN | S REMOTE | | A SMAF | RT INDUSTRY |

Figure 2.1: mGuard Secure Cloud public // Sign up

Within the mGuard Secure Cloud public, the tenant is the top instance and is a closed unit in terms of data technology and organization. The mGuard Secure Cloud therefore offers the option of disjunctive, tenant-oriented data recording, presentation (UI), and configuration. Each tenant can therefore only see and modify their own data, i.e., all data is protected from other tenants. Only the assigned tenant can access this data, although in certain exceptional cases (troubleshooting, administration or change management) it may be that the Secure Cloud service or parties explicitly authorized by Innominate are granted access, however never other customers or other unauthorized parties.

| d e-mail address: * ail@email.com |
|--------------------------------------|
| d e-mail address: * ail@email.com |
| ail@email.com |
| |
| name: • |
| |
| name: * |
| no numberi 🕇 |
| ne number. * |
| |
| word: * |
| eat password: * |
| |
| did you hear about us? * |
| - |
| |
| |

Figure 2.2: mGuard Secure Cloud public // Registration form



Figure 2.3: mGuard Secure Cloud public // Registration form – Machine network

| Evaluation License Agreement | | |
|--|---|------------|
| (see below for German version) | | - |
| Online Evaluation License Agreement (I Version 1.1, Effective: January 2014 | Eval-EULA) for mGuard Secure Cloud public | |
| Please accept the Evaluation License Agreeme | inti * 🔲 | |
| Please identify the following security code: ** | | |
| pVmste 2 | Security code: * | |
| ** Entering security codes (Captoha) is used to determine whet Privacy policy | ther or not the user is human. | <u>∫</u> ₽ |
| Cancel | ок | |

Figure 2.4: mGuard Secure Cloud public // Registration form – Security code

3 Login for the first time

Role: Master Admin, Admin

The initial login process for the mGuard Secure Cloud public is always in the form of a tenant. All activities carried out in the Cloud are therefore always performed within a tenant.

After sending back the signed license agreement, the 'Masteradmin' user receives the access data, which is sent to the specified e-mail address. Please keep this in a safe place and do not allow others access to this data.

This data (tenant/account ID, user ID, and password) can now be used to login into the mGuard Secure Cloud public for the first time.

Process steps

- 1) Click 'Sign in | Sign up' at the top of the cloud UI at the login page of the mGuard Secure Cloud public.
- 2) Complete the relevant fields in the 'Sign in' area (Account, User, Password)
- 3) Put the check mark at 'Stay signed in' and stay logged in up to 1 month
- 4) Put no check mark at 'Stay signed in' and you'll logged out after 1 hour inactivity
- 5) Click the button 'Sign in'.



Figure 3.1: mGuard Secure Cloud public // Signing in

3.1 Password forgotten?

If you have forgotten your login/password combination, use the 'Password forgotten' link in the login panel to request a new password. The correct tenant/user combination must be entered in the form that appears. A link to set a new password is sent to the user e-mail address stored in the Cloud. Please note that this link is only valid for a maximum of 24 hours. If this link does not appear in your inbox within a few minutes, please check your spam filter or spam folder.

| Up to this point, mGuard VPNs wer But now, they are secure AND easy Convince yourself by testing us: Sign in. Select. Connect. you connect. we protect. | re secure. A / to use. L P | Sign in Account: Jser: Password: Stay sign | ed in: | | Sign up No mGuard Secure Cloud user yet? Sign up now for free! Your benefits as a registered user: • Free testing. Free use. • Build and manage VPNs easily • Start your service connections with only one click |
|---|---|--|--|-------------------------------|--|
| copyright © 2011-2015 Innominate Security Technologies AG | | Passwor | d reset | | The second second |
| CLOU | Information how to proc You can reset the passwor information for authentica You'll receive an e-mail at proceed. Please make sure Account: * User: * | :eed: rd for your account by provid ation reasons and request a r t your given e-mail address w e that this e-mail will not be t | ing some information. ۱۹۳۷ password. ithin a few minutes wit vlocked by spam filters. | Please fill o h all inform | Dut all mandatory |
| | Dis | card | | ОК | |

Figure 3.2: mGuard Secure Cloud public // Password reset

3.2 Online check via IP check

To enable the mGuard Secure Cloud public to detect a logical connection between the web browser of the service workstation and the service VPN tunnel to the mGuard Secure Cloud, an IP check is performed. This involves an HTTPS call (including session ID of the web session) to the address '*ip-check.de.mguard.com*' or '*ip-check.us.mguard.com*' by the encrypted service VPN tunnel.

On a successful HTTPS call, in the mGuard Secure Cloud public the status of the web session is set to 'online' and in the UI the service status indicator changes from red (offline) to green (online). Secure VPN connections to machines can now be established.

3.3 IP check with JavaScript

The IP check always uses an Ajax request (asynchronous data transmission between a browser and the server). If the use of a proxy server for the HTTPS protocol is configured in the browser or in the operating system, then an exception must be configured for the host '*ip-check.de.mguard.com*' or '*ip-check.us.mguard.com*' (Section <u>1.5</u>). Otherwise the HTTPS call would not be routed to the VPN tunnel (the proxy would send the call to the Internet without effect and receive no response).

3.4 IP check via Java applet

Since it cannot be assumed that the user is able to configure a proxy exception without problems, the mGuard Secure Cloud public provides an alternative procedure for the IP check. When a proxy server is detected, a Java applet is called in the browser, which makes the relevant HTTPS call without the mandatory use of a proxy server.

The IP check via applet is supported for the following browsers with <u>Java Runtime Environment</u> (JRE) Version 1.6 or 1.7:

Microsoft Windows

- Firefox Version 11 or later
- Google Chrome Version 24 or later
- Microsoft Internet Explorer Version 8 or later

Linux

• Firefox Version 18 or later

Apple Mac OS X

• Safari Version 5 or later

The Java plug-in (part of the relevant JRE) must be activated in the relevant browser (in the Internet zone the scripting of Java applets must also be enabled).

When the applet is initiated for the first time, you must agree that the applet can be run (see figure). We recommend activating the option 'Do not show this again for apps from the publisher and location above' (check the box and click on 'Run').

| mGuard Re | Möchten Sie diese Anwendung ausführen? | len der Se |
|-----------|--|------------|
| | Name: applet_ip_check | |
| | Anbieter: Innominate Security Technologies AG Von: https://: | |
| | Diese Anwendung wird mit uneingeschränktem Zugriff ausgeführt. Dies kann ein Risiko für Ihren Rechner und Ihre persönlichen Informationen darstellen. Führen Sie diese Anwendung nur aus, wenn Sie dem Anbieter vertrauen. | |
| | Für Anwendungen dieses Anbieters und aus diesem Speicherort nicht mehr anzeigen | |
| | Mehr Informationen Ausführen Abbrechen | |

Figure 3.3: IP check applet

3.5 Autodetect mechanism

The mGuard Secure Cloud public now automatically detects the process used (JavaScript or applet) to perform the IP check. The successful method is stored in a cookie on your local computer. If there is no method stored in a cookie, the IP check is always performed with JavaScript first.

4 Initial steps as an administrator

Role: Master Admin, Admin

After logging into the mGuard Secure Cloud public, you always start at the 'Service Targets (Machines)' menu item. This is so that during servicing a remote service can be started for the relevant machine as quickly as possible. However, initially you will just find an empty page, without machines and without operators or locations for machines.

The following organizational steps and processes provide a quick and easy means of establishing a secure connection between the service workstation and the machine.

4.1 Service Workstations and Service Targets (Machines)

The service organization in the Secure Cloud is divided into two areas: 'Service Workstations' and 'Service Targets (Machines)'.

In the menu item 'Service Workstations' the workstations for your service staff can be created. In the menu item 'Service Targets (Machines)' operators or locations (first level) and their associated machines (second level) can be created.



If the number of tabs of all operators/locations is too big to be shown on the display, operators/locations can be filtered by alphabetic or numeric criteria.

Start with the creation of service workstations by selecting the menu item 'Service Workstations'.

Level 1: Create service workstations

Hint

Level 1: Edit service workstations

| Menu item | 'Service Workstations' > select workstation and click == > select 'Workstation Information' |
|-----------|---|
| | and click 🧪 > edit workstation information > click button ´OK´ |

Level 1: Delete service workstations

| Menu item | 'Service Workstations' > select workstation and click => VPN administration > click but- |
|-----------|--|
| | ton 'Delete' |

In the next step, add the operators and locations of your machines and assign the service targets (machines). Select the menu item 'Service Targets (Machines)'.

Level 1: Create operators/locations

| Menu item | 'Service Targets (Machines)' > tab (+) > 'Add new operator/location' > insert description of |
|-----------|--|
| | operator/location > click button 'OK' |

Level 1: Edit operators/locations

| Menu item | Service Targets (Machines) > select <operator location=""> tab 💉 > 'Edit</operator> |
|-----------|--|
| | operator/location and enter meaningful data > click button OK |

Level 1: Delete operators/locations

Hint

| Menu item | <pre>`Service Targets (Machines)' > select <operator location=""> tab > click button 'Delete operator/ location'</operator></pre> |
|-----------|---|
|-----------|---|



An operator/location can only be deleted if there are no assigned machines. Thus, you have to delete all machines under an operator/location first.

Level 2: Create Service Targets (Machines)

| Menu item | Service Targets (Machines)' > select tab <operator location=""> > select tab</operator> |
|-----------|--|
| | 'Create new machine' > insert descriptions for machine > click button 'OK' |

Level 2: Edit Service Targets (Machines)

| Menu item | 'Service Targets (Machines)' > tab <operator location=""> > select machine and click 📃 ></operator> |
|-----------|---|
| | 'Edit machine information' 🧪 > click button 'OK' |

Level 2: Delete machines

| Menu item | 'Service Targets (Machines)' > tab <operator location=""> select machine and click == > area</operator> |
|-----------|--|
| | 'Machine administration' > Machine: click button 'Delete' |

Level 2: Machine information > Add location data (optional)

To add precise positioning data (latitude and longitude) to each machine, proceed as follows:

| | 'Service Targets (Machines)' > tab <operator location=""> > select machine and click == ></operator> |
|-----------|--|
| M | 'Edit machine information' 🧪 > click into the field 'Positioning data (Lat,Long)' > an Open- |
| Menu item | StreetMap-Window appears > click on the magnifier icon \mathbf{Q} > enter the location name dedicated to your machine > select the proper name from the drop down list box > click button 'OK' > click button 'OK' |

4.2 Configure a VPN connection (VPN Builder)

The service session between service workstations and service targets (machines) is secured via an encrypted VPN tunnel (Virtual Private Network).

Before a service workstation can connect to a service target (machine) via the VPN tunnel, the associated VPN clients must be configured in order to establish a VPN connection to the mGuard Secure Cloud public.

Service workstations can be connected to the cloud using either software VPN clients or mGuard devices. Service targets (machines) can only be connected to the cloud using mGuard devices.

The creation (building) of VPN configurations is carried out by and within the Secure Cloud public using the VPN Builder. The built VPN configurations are made available for download afterwards. After the import of the VPN configuration into the corresponding VPN clients (service workstation and service target (machine)) is finished, the clients are configured for the connection to the Secure Cloud public and able to establish a VPN tunnel to the cloud.

The configuration of the VPN clients is described in the following sections.

4.2.1 Preconditions

Hint

The VPN connections between VPN clients and the mGuard Secure Cloud public are based on the IPsec protocol. The communication based on the IPsec protocol is carried out using **UDP port 500** (IKE) and **UDP port 4500** (NAT Traversal).



The **UDP ports 500** and **4500** must be open on both VPN clients (service workstation and service target (machine)). This also applies to routers used during connection and existing firewall rules.

TCP encapsulation

In case it is not possible to establish a VPN connection using **UDP ports 500** and **4500**, the IPsec connection must be tunneled. Therefor the option 'TCP encapsulation' must be enabled to transmit UDP packets encapsulated inside TCP packets. The standard port used in this case is the **HTTPS-Port 443**. Port 443 must therefore be opened permanently on both sides of the connection.

4.2.2 Build a VPN configuration

The creation (building) of the VPN configurations is carried out by and within the Secure Cloud public using a configuration wizard, the VPN Builder.

The following buttons are available:



Proceed as follows:

Service Workstation

| Menu item | Service Workstations´ > ´All workstations´ tab > Select workstation # > VPN administrationVPN connection > VPN Builder´ button > Complete form > 'Request' button | |
|-----------------|---|--|
| V/DN administra | stion | |

| VPN auministration | | | |
|---|--|---|------------------------|
| VPN connection: | 🎽 VPN Builder | | |
| VPN configuration: | ✓ Download file | | |
| | 💼 Delete | | |
| Last machine connection: | 08/06/2015 16:48:01 | | |
| esse messanare sumesan see Jan eller slive bebound | VPN Builder Request service \ | ∨PN configuration | nlann alber Unets et b |
| 1 VPN client type | VPN connection 3 Machine network | | |
| VPN client type | | | |
| What kind of VPN client are you going mGuard VPN appliances like mGuard You may also use a certified softward | g to use for this service workstation? Your workstation can be secur d smart ^a or mGuard delta ^a . e IPsec VPN client like the <i>mGuard Secure VPN Client</i> . | ely connected to the mGuard Secure Cloud pu | iblic via |
| Choose a VPN client type | | | |
| mGuard Secure VPN Client (co | ommercial software client with vendor support) | | |
| Shrew Soft VPN Client (free op | pen source software client) | | |
| mGuard VPN appliance (hardv | vare) | | |
| Please enter the client password | : and Becommented Clarif | | |
| Password: * | | | |
| ••••• | Show | | |
| Repeat password: * | | | |
| ••••• | Show | | |
| * = mandatory field | | | |

Figure 4.1: VPN Builder for service VPN configuration

Use the VPN Builder to configure the following items:

VPN client type: Specify, if the service workstation will be connected to the Secure Cloud via software VPN client (mGuard Secure VPN Client or Shrew Soft VPN-Client) or via hardware client (mGuard device).

VPN connection: Specify, if the VPN client (mGuard device) shall establish a VPN connection using UDP port 4500 and 500 via TCP encapsulation in case of connection problems.

Machine network: Configure the destination network, to which the service target (machine) belongs. The network corresponds with the destination network, already provided during registration.

Service Targets (Machines)

Menu item'Service Targets (Machines)' > 'Location/operator' tab > Select machine # > VPN administra-
tion > VPN connection > 'VPN Builder' button > Complete form > 'Request' button

| VPN Builder Request machine VPN configuration | | | | | |
|---|---|---|---|--------------------|--------|
| | | | | | |
| 1 mGuard mode | 2 VPN connection | | 4 External network | 5 Internal network | 6 Misc |
| Guard operation mod | е | | | | |
| ne mGuard can operate in | different modes: | | | | |
| if the machine is designed if the end customer netwo | to fit into the existing network the rk and the machine network are di | Stealth mode (which beha fferent, the Routermode s | aves transparently to the network) should I should be used to connect both networks. | be used. | |
| if the machine is connecte choose Ethernet plus 3G i | d via a mobile connection 3G should be a mobile connection is used as a | uld be used. fallback for an ethernet (| connection | | |
| Choose a mode | | | | | |
| Stealth | | | | | |
| Router | | | | | |
| © 3G | | | | | |
| | | | | | |
| Ethernet plus 3G | | | | | |

Figure 4.2: VPN Builder for machine configuration

Use the VPN Builder to configure the following items:

mGuard mode: Specify the operation mode of the mGuard.

VPN connection: Specify, if the VPN client (mGuard device) shall establish a VPN connection using UDP port 4500 and 500 via TCP encapsulation in case of connection problems.

3G: Specify the login details of the mobile network operator.

External network: Indicate under which network address the WAN interface of the machine mGuard can be reached from external networks. You can specify a static IP address, the netmask and the default gateway.

If the machine mGuard gets its external IP address dynamically from a DHCP server, select "Dynamic IP address (DHCP)".

You can optionally specify the IP address of a distinct DNS server.

Internal network: Specify the IP address of the machine mGuard and the netmask of the internal network to which the machine mGuard and the service target (machine) belong.

Misc.: Choose the format of the VPN configuration for your machine connection:

- type .atv to upload the configuration via the mGuard web interface
- type .ecs to activate the configuration via external configuration memory (e.g. SD card, USB stick). Note that the "ecs file" is contained in a zipped "tgz file", which must be used to import the configuration into the mGuard device.

If the VPN connection of the machine mGuard shall be initiated via a key switch (Service-IO), the feature can be activated here.

After the VPN configuration has been created, it can be downloaded directly from the Secure Cloud public and be imported into the appropriate VPN client.



Hint

The VPN configurations for service workstations and service targets (machines) can be changed, downloaded arbitrarily. Just repeat the corresponding steps described above.

4.2.3 Download the VPN configuration

The VPN configurations for the service workstation and the service target (machine) will be available for download immediately and may be stored and used locally for further configuration of the VPN clients.

| Manuitan | 'Service Workstations' > 'All workstations' tab > Select workstation # > VPN administration > |
|-----------|---|
| wenu item | VPN configuration: > 'Download' button |

The corresponding configuration (.zip file extension in case of the mGuard Secure VPN Client or .vpn file extension for the Shrew Soft VPN client) for the machine can be downloaded and stored locally for further configuration of the machine mGuard.

| Monu itom | Service Targets (Machines)' > 'Location/operator' tab > Select machine # > |
|-----------|--|
| Menu item | VPN administration > VPN configuration: > 'Download' button |

The corresponding configuration (file extension .atv or .ecs for encrypted configurations with firmware version 7.6.1) for the machine can be downloaded and stored locally for further configuration of the machine mGuard.

4.2.4 Upload the VPN configuration to the mGuard

Once you have downloaded and locally stored the VPN configuration, previously created in the Secure Cloud public (VPN Builder), the configuration file must be imported to the appropriate VPN client.



The status of all the variables of the mGuard device that have not been configured in the Secure Cloud will be set to factory default.

Hint

Hint



For tailored machine configurations that can not be configured by the VPN-Builder (e.g. firewall rules) the Premium-Edition gives you the possibility to deposit so-called ATV Includes in the Secure Cloud backend.

These predefined values can be applied to the complete account-level or only to individual machines. If you have any questions, please contact the Secure Cloud Support.

| Manage | Management » Configuration Profiles | | | | | | | |
|---------|---|--|---------|----------|--------|--|--|--|
| Co | Configuration Profiles | | | | | | | |
| Cont | Configuration Profiles | | | | | | | |
| Statu | s | Name | | Action | | | | |
| × | Factory Default | | Restore | Download | | | | |
| × | HomeOffice | | Restore | Download | Delete | | | |
| V | Office Berlin | | Restore | Download | Delete | | | |
| Sav | e Current Configuration to Profile Upload Configuration to Profile | Name for the new profile: Save Name for the new profile: admin Filename: Durchsuchen_ Keine Datei ausgewählt. Upload | | | | | | |
| Exte | ernal Config Storage (ECS |) | | | | | | |
| | Current state of the ECS | Not present | | | | | | |
| Sav | ve the current configuration to an ECS | The root password to save to the ECS: •••••• | ave | | | | | |
| , | Automatically save configuration changes to an ECS | No 🔻 | | | | | | |
| | Encrypt the data on the ECS | No 👻 | | | | | | |
| Note: E | Encrypted ECS data can only be | read by this device | | | | | | |

Figure 4.3: mGuard Web UI

To import a configuration into the mGuard devce, log in to the web interface (UI mGuard) on the mGuard. Then proceed as follows:

mGuard UI 'Administration' menu item > 'Configuration profiles' tab > 'Upload Configuration to Profile'

Select and use the previously downloaded VPN configuration with the file extension .atv. Make sure that the correct configuration file has been selected. After uploading the configuration to the mGuard, it will be listed as a new configuration profile. Please activate the new configuration profile by clicking on the button 'Restore' (A green check mark indicates the activated profile). Dependent on the chosen mGuard mode (Stealth or Router), the mGuard can subsequently be reached via the management ip address: https://1.1.1.1 or https://192.168.1.1.



After the configuration has been activated in the mGuard device, remote access to the web UI via HTTPS is only possible, if the service workstation has established an active VPN connection.

The mGuard can also be configured using an SD card or a USB flash drive. To do so, a configuration file (ecs file), zipped in a tgz-container, must be used. The configuration file is loaded, decrypted, and used as a valid configuration.



Hint

Hint

Back up all existing configurations on the mGuard device before you import the configuration file created in the Secure Cloud via SD card / USB drive to the device. All variables, not configured in the Secure Cloud, will be set to factory default.



Hint

The VPN configurations for service workstations and service targets (machines) can be changed, downloaded and imported arbitrarily. Just repeat the corresponding steps described above.

4.2.5 Upload the VPN configuration to the software VPN client

Once you have downloaded the previously created VPN configuration (mGuard Secure Cloud public - VPN Builder), it has to be imported into the appropriate software VPN client. The procedure for the two currently supported software VPN clients is described as follows:



The VPN configurations for service workstations and service targets (machines) can be changed, downloaded and imported arbitrarily. Just repeat the corresponding steps described above.

mGuard Secure VPN Client

Hint

- 1) Start the mGuard Secure VPN Client.
- 2) Select under 'Configuration' > 'Profiles' > 'Add/Import' the relevant mGuard Secure VPN Client configuration file (*.zip) downloaded before from the mGuard Secure Cloud public.



| Profiles | | | - • × |
|----------------------------|------------------|--------------|--------|
| Available Profiles | | | |
| Group: | | | |
| Show all profiles | | - | Group |
| Profile Name 🔺 | Communication Me | dium Default | |
| mGuard Secure Cloud public | LAN | | |
| Service 1 | LAN | | |
| Add / Import Edit | Сору | Delete | Export |
| | Help | ОК | Cancel |

3) Choose 'Profile Import' as configuration type.



- 4) The VPN configuration will be loaded and is available within the mGuard Secure VPN Client as a new profile.
- 5) The connection to the mGuard Secure Cloud public can now be initiated by a click on the slider 'Connection'.



6) During the first VPN connection to the Secure Cloud public, the certificate PIN, already specified in the VPN Builder, is requested.





Hint For security reasons, please change the initial PIN periodically.

To change the PIN proceed as follows:

- 1) Open the mGuard Secure VPN Client.
- 2) Go to the menu item 'Connection > Enter PIN'.
- 3) Enter the current PIN.
- 4) Enter and confirm the new PIN.
- 5) Click 'OK'.

Shrew Soft VPN Client

- 1) Start the Shrew Soft VPN Client (VPN Access Manager).
- 2) Select under File > Import the relevant Shrew Soft VPN configuration file (*.vpn), downloaded before from the mGuard Secure Cloud public.
- 3) The VPN configuration will be loaded and is available within the Shrew Soft VPN Client.
- 4) Select the configuration and start the connection to the mGuard Secure Cloud public by a simple click on 'Connect'.

| (3) VPN Access Manager | | VPN Ac | cess Ma | nager | | - 0 |
|------------------------|-----------|-----------|--------------|--------|--------|-----|
| File Edit View Help | 7 | File Edit | View | Help | | |
| Connect | | | C | | | |
| Import | fy Delete | Connect | Add | Modify | Delete | |
| Export 63 | | | | | | |
| Preferences Exit |] | Servio | e001 .vpn | | | |
| | | | | | | |
| | | | | | | |

4.2.6 Checking the VPN connections using the status indicators

| Menu item | 'Service Workstations' > 'active VPNs' tab > Workstation # > online |
|-----------|---|
|-----------|---|

The mGuard or VPN client for the service workstation has connected to the mGuard Secure Cloud correctly via the VPN tunnel, if the status indicator for the service VPN changes from 'offline' to 'online'.

| Service Routing Machine | | | | | | | | |
|--|---|------------------------------|---------|--|--|--|--|--|
| Service Targets (Machines) Service Workstations | Administration Log | gbook Preferences | | | | | | |
| Service VPN tunnel online > no secure connection initiated > | no secure remote access to service target (| machine) | | | | | | |
| active VPNs all Service Workstations | | | | | | | | |
| Workstations | | | | | | | | |
| 1 Workstation: KBS-Detroid | no user | not connected VPN: offline | 🗡 🔸 📃 | | | | | |
| 2 Workstation: KBS_Service_2 | ************************************ | not connected VPN: online | | | | | | |
| 3 Workstation: KBS_Service_4 | no user | not connected VPN: offline | | | | | | |

Figure 4.4: mGuard Web UI // Service VPN online

In addition, the 'Service' status indicator must change from grey to green.

| Service | Routing | Machine |
|---------|---------|---------|
| | | |

| Menu item | 'Service Targets (Machines)' > 'active VPNs' tab > Machine # > online |
|-----------|---|
|-----------|---|

The mGuard for the machine has connected to the mGuard Secure Cloud public correctly via the VPN tunnel if the status indicator for the machine VPN changes from 'offline' to 'online'.

| Service Targets (Machines) | Service Workstations | Preferences | | | |
|--|--|--|---------------------------------|---------------------------|-----------------------|
| Service VPN tunnel online > | no secure connection initiated | > no secure remote access to | service target (machine) | | |
| | | show operator/location: All 0-9 |) A-B C-D E-F G-H I-J | K-L M-N O-P Q-R S | ;-T U-V W-X Y-Z |
| active VPNs Berlin | Detroid Tokio | | | | |
| active VPN connections | to Service Targets | | | | |
| On this tab, you can see all this page via 🤕 immedia | II Service Targets like facilities ar ttely shows the current status of | nd machines currently connecte the VPN connections. | d with the mGuard Secure (| Cloud public via secure | e VPN. Reloading |
| 2 Operator: Detro | pid Mac1 | hine: Machine B | SN: 135866458557 | VPN: online | Start |

Figure 4.5: mGuard Web UI // Machine VPN online

Quick Start: Click on the green 'Start' button for the machine to be serviced. All status indicators change to green.



4.3 User administration

| | Routing | Machine | Service Targets (| | | ons | Administration | | | | |
|--|--|--|--|--|---|---|--|---------------------|-----------|----------------------|--|
| Service VPN tunnel online > no secure connection initiated > no secure remote access to service target (machine) | | | | | | | | | | | |
| User ad | ministration | Access permissions | VPN connections | Account data | Master data | Prices | Info & Downloads | Release Not | tes | | |
| Admini | stration | | | | | | | | | | |
| User ad | ministration | | | | | | | | | | |
| Here, us Premium | ers can be add | led, modified or deleted ion to the default permis | and given a role and a sion group additional p | occess permiss | ons. Ips can be assigned | to users. Ho | wever, these additiona | I | | | |
| Here, us Premium permissi defined u Basic tai be remov Show Hi Nr. | ers can be add -Tariff: In additi ons are only ac under the tab 'A "iff: Each user is ved, nor can ad nt • User | led, modified or deleted ion to the default permis titue if the default permis Access permissions' befis first automatically assig dditional permission grou | and given a role and a sion group additional j sion group was previo ore. gned to the default per ups be added. | ccess permiss permission grou usly revoked fr mission group. | ons. ups can be assigned i om the user. Access i In the basic tariff, the lame: | to users. Ho rules and pe e default per | wever, these additiona rmission groups must mission group can neit Role | I be ther | Edit | Delete | |
| Here, us Premiun permissi defined I Basic tai be remo Show Hi Nr. 1 | ers can be add - Tariff: In addiff: In a | led, modified or deleted ion to the default permis tive if the default permis Access permissions' bef is first automatically assig didtional permission grou @innominate.com | and given a role and a sion group additional i sion group was previo ore. gned to the default per prs be added. | ccess permiss permission grou usly revoked fr mission group. | ons. ups can be assigned om the user. Access i In the basic tariff, the lame: tuster, Max | to users. Ho rules and pe e default per | wever, these additiona rmission groups must mission group can neil Role Masteradmin | I be ther | Edit | Delete | |
| Here, us Premium permissi defined I Basic tai be remo Show Hi Nr. 1 2 | ers can be add Tariff: In additi ons are only ac under the tab 'A iff: Each user is ved, nor can ad nt • User george@l | led, modified or deleted ion to the default permis tive if the default permis Access permissions' bef first automatically assig dditional permission grou @innominate.com | and given a role and a sion group additional i sion group was previo ore. jned to the default per ups be added. | ccess permisso permission grou uusly revoked fr mission group. | ons. ups can be assigned i om the user. Access i In the basic tariff, the lame: tuster, Max immermann, George | to users. Ho rules and pe e default per | wever, these additiona mission groups must mission group can nelf Role Masteradmin user | I be her | Edit | Delete | |
| Here, us Premium permissi defined I Basic tai be remo Show Hi Nr. 1 2 3 | ers can be add to -Tariff: In addition to not are only ac under the tab 'A ved, nor can ad nt User User george@l fai. young | led, modified or deleted ion to the default permis tive if the default permis Access permissions' bef first automatically assis diditional permission grou @innominate.com | and given a role and a sion group additional i sion group was previo ore. gned to the default per ups be added. | ccess permission group. permission group. the second sec | ons. ups can be assigned : om the user. Access : In the basic tariff, the lame: tuster, Max Immermann, George tark, Thomas | to users. Ho rules and pe e default per | wever, these additiona mission groups must mission group can nell Role Masteradmin user user | i be her ¢ | Edit 1 | Delete (×) (×) | |

Figure 4.6: mGuard Secure Cloud public // User administration

4.3.1 Add new user

| Monuitom | 'Administration' > Tab 'User administration' > click button 'New user' > Insert user name, last |
|-----------|---|
| Menu item | name, first name, select role, insert password, repeat password > click button 'OK' |

4.3.2 Edit user / Change role

| Menu item | 'Administration' > Tab 'User administration' > select user > click 'edit' 🧪 > edit information |
|-----------|--|
| | > click button 'OK' |

4.3.3 Delete user

| Menu item | 'Administration' > Tab 'User administration' > select user > click 'delete' 😠 |
|-----------|---|
| | click button 'OK' |

4.3.4 Permissions

Access permissions allow granular control over which users can access what locations / operators and machines in the form of user-defined permissions and permission groups. This feature is available only in the Premium Edition of the mGuard Secure Cloud public (see Chapter 4.4).

Premium Edition: In addition to the default permission group that is automatically assigned to each new user, additional permission groups can be assigned to users in the premium edition. However, these are only active when the default permission group was revoked before from the user. Prior to this, access rules and permission groups must be defined under the tab 'Access permissions'.



Please note that the default permission group allows access to all operators / locations and all machines within a tenant and thus overrides all other permissions.

Basic Edition: Each user is first automatically assigned to the default permission group. The default permission group can neither be removed in the basic tariff, nor can additional permission groups added.



4.3.5 Assigning access permissions to a user (premium feature \pm)

| | 'Administration' > Tab 'User administration' > choose user > click icon 'Edit' > |
|-----------|--|
| Menu item | click button 'Add permission' > choose a permission group > click button 'OK' > |
| | add additional permission groups of click button. OK |

4.3.6 Edit / delete access permissions of a user (premium feature \pm)

| Service Routing Machine Service VPN tunnel online > no secure connect User administration Access permissions Administration Access permissions User administration Here, users can be added, modified or deleted a premium-Tariff: In addition to the default permiss defined under the tab 'Access permissions' before asso tariff: Each user is first automatically asso neither be removed, nor can additional permissions' before the treatment. Nr. User 1 kbentlage@innominate.com | | Editusor | |
|--|--|--|---------------|
| User administration Access permissions Administration User administration Here, users can be added, modified or deleted a Premium-Tariff: In addition to the default permiss permissions are only active if the default permiss defined under the tab 'Access permissions' before Basic fariff: Each users is first automatically assign neither be removed, nor can additional permission Show Hint Nr. • User 1 kbentlage@jinnominate.com | User name (valid e-mail address): george@innominate.com | Role: User | × Preferences |
| Nr. • User | Last name: * Zimmermann First name: * George Access permissions ★ Nr. Permission group 1 Default (all operators/locat 2 Detroid only | Add permission Choose a permission group: Default Defa | n group OK |
| 2 george@innominate.com 3 kai.bentlage@gmx.de 4 Thomas@innominate.com | *= mandatory field - passwords must be at least 8 characters long and Cancel | Add permission d should contain letters, numbers and special characters. | Edit Delete |

Figure 4.8: mGuard Secure Cloud public // User administration > Add permission group

4.4 Access permissions (premium feature \star)

Premium Edition: With the help of access rules any access rights to locations / operators and their machines can be defined and summarized in permission groups. These permission groups can then be assigned to users in the user management. Previously defined permission groups can only be deleted if NO user is assigned to (referenced).

Basic Edition: Basic Edition does not allow defining own access rules and permission groups. Only the permission group 'Default' is displayed.



Hint

Please note that the permission group 'Default' allows access to ALL locations/operators and machines and can not be deleted or edited.

| Service | Routing | Service Targets (Machines) | Service Workstations | Administration | Logbook | Preferences | | | |
|--|---|----------------------------|----------------------|----------------|-----------|----------------------|--|--|--|
| Service VPN tu | Service VPN tunnel online > no secure connection initiated > no secure remote access to service target (machine) | | | | | | | | |
| User adminis | User administration Access permissions VPN connections Account data Master data Prices Info & Downloads Release Notes | | | | | | | | |
| Administra | ation | | | | | | | | |
| Access per | missions ★ | | | | | | | | |
| Premium-Tariff: With the support of access rules any access rights to operators/locations and their machines can be defined and summarized in permission groups. These permission groups can then be assigned to users within the user administration. Basic tariff: In Basic tariff no own access rules and permission groups can be defined. Only the permission group 'Default' is displayed. Hint: Please be aware that the access permission 'Default' allows access to ANY operator/location and machine and cannot be deleted or edited. Previously defined permission groups can only be deleted if they are NOT assigned to any user (referenced). | | | | | | | | | |
| Nr. | Permission group | \$ | Edit | | Delete | | | | |
| 1 | Default (all operators/locations | > all machines) | | | | | | | |
| 2 | Detroid only | | 1 | | \otimes | | | | |
| 3 | Extern | | 1 | | \otimes | | | | |
| 4 | Hamburg only | | 1 | | \otimes | | | | |
| | | | | | | New permission group | | | |

Figure 4.9: mGuard Secure Cloud public // Access permissions overview

4.4.1 Adding new permission groups

A permission group defines, which machines can be accessed by the users of the permission group. For this purpose one or more access permissions are applied within a permission group that regulate the access to the service targets (machinery).

| Menu item | 'Administration' > Tab 'Access permissions' > click button 'New permission group' > define |
|-----------|--|
| | name of permission group > click button 'OK' |

4.4.2 Deleting permission groups

Hint

| Menu item | 'Administration' > Tab 'Access permissions' > choose permission group to delete > click icon |
|-----------|--|
| | ´Delete´ 💌 > click button ´OK´ |



Permission groups can only be deleted if they are NOT assigned to any user (referenced). If you get an related error message, go to the user administration tab and revoke the permission group from the relevant users.

4.4.3 Adding new access rules to permission groups

One or more access permission can be assigned to one permission group. The access permissions determine which service targets (machines) can be accessed by the members of the group.

| Menu item | Administration '> Tab 'Access permissions' > choose permission group > click icon 'Edit' > click button 'Add access rule' > choose a Operator/location or 'All' > choose 'Service target (machine)' or 'All' > click 'OK' > if adding further access rules necessary repeat these steps > |
|-----------|---|
| | click button 'OK' |

| ice VPN | tunnel online > | | E | dit | | New access rule | | |
|-----------------------------------|---|-------------|--|-------------------|--------|------------------------|------|--|
| ser admir | nistration A | Permission | n group name: * | Operator/loc | ation | Service target (mach | ine) | |
| dministr | ation | Detroid o | only | Detroid | | Machine B | | |
| cess pe | ermissions ★ | * = mandato | bry field | Detroid | | All Machine A | | |
| e <i>mium-Ta</i> permissio | ariff: With the su | Nr. | Operator/location > Service target (machine | ≥) | | Machine B Machine C | L7 | |
| sic tariff: | In Basic tariff no | 1 | Operator/location: Detroid > Service target (ma | chi | Cancel | | ОК | |
| nt: Pleas d cannot any user | e be aware that to be deleted or edit (referenced). | 2 | Operator/location: Detroid > Service target (ma | chi | | (6) | | |
| , | | 3 | Operator/location: Detroid > Service target (ma | chine): Machine C | | \otimes | _ | |
| r. | Permissi | | | | | Dellars. | | |
| | Default (a | | | | | Add access rul | e | |
| | Detroid o | | | | | | | |
| | Extern | | Cancel | | | OK | | |
| | Hamburg | | Ganoor | | | on | | |

Figure 4.10: mGuard Secure Cloud public // adding new access rule

4.4.4 Revoking access rules from permission groups

 Menu item
 'Administration' > Tab ' Access permissions ' > choose permission group > click icon

 'Edit' > choose access rule to be deleted > click icon 'Delete' > click button

 'Delete access rule' > if deleting further access rules necessary repeat these steps > click button 'OK'



Hint

All changes for permission groups will affect the referenced users immediately.

5 First steps as a user

Role: User

The following steps and processes provide a quick and easy means of establishing a secure remote maintenance connection between the service workstation and the machine.

5.1 Login to the mGuard Secure Cloud public (Sign in)

Your personal login data (tenant ID, user ID, and password) can be used to log into the mGuard Secure Cloud public.

Process steps

- 1) Click 'Sign in | Sign up' at the top of the cloud UI at the login page of the mGuard Secure Cloud public.
- 2) Complete the relevant fields in the 'Sign in' area (Account, User, Password)
- 3) Put the check mark at 'Stay signed in' and stay logged in up to 1 month
- 4) Put no check mark at 'Stay signed in' and you'll logged out after 1 hour inactivity
- 5) Click the button 'Sign in'.

| Sign in | | Sign up |
|-----------|----------------------------|--|
| Account: | YDH13000DE | No mGuard Secure Cloud user yet? |
| User: | max.muster@innominate.com | Your bapafits as a registered user: |
| Password: | ••••• | Free testing. Free use. |
| | Stay signed in: | Build and manage VPNs easily Start your service connections with only one click |
| Sign in | Password forgotten? | Sign up |
| | Hello Guest! Close panel | |

Figure 5.1: Login to the mGuard Secure Cloud public

5.2 Check the online status of the service workstation

If your service workstation has established a VPN connection to the Secure Cloud, the status indicator 'Service' must have a green background color.



If the status indicator 'Service' has a red background color, check the connection of you service workstation (mGuard device or software VPN client) or if the VPN connection has been started.

Alternatively, the status can be checked as follows:

| Menu item 'Service Workstations' > 'active VPNs' tab > Workstation # > online |
|---|
|---|

5.3 Choose Operator/Location

To connect to a machine with of specific operator/location via VPN tunnel, an operator/location has to be selected. Proceed as follows:

| Menu item 'Service Targets (Machines)' > select tab with desired operator/location | |
|--|--|
|--|--|



Hint

If the number of tabs of all operators/locations is too big to be shown on the display, operators/locations can be filtered by alphabetic or numeric criteria.

| Service Targets (Machines) | Service Workstations | Preferences | | | |
|--|----------------------|-----------------------------------|---|--|--|
| Service VPN tunnel online > no secure connection initiated > no secure remote access to service target (machine) | | | | | |
| | | show operator/location: All 0-9 | A-B C-D E-F G-H I-J K-L M-N O-P Q-R S-T U-V W-X Y-Z | | |

5.4 Connecting the service workstation to the machine

Menu item 'Service Targets (Machines)' > 'active VPNs' tab > Machine # > online

As soon as the status indicator of the target machine has the green 'online' status, the machine mGuard has connected to the mGuard Secure Cloud public correctly via the VPN tunnel.

| Service Targets (Machines) | Service Workstations | Preferences | | | |
|--|---|-----------------------------------|---------------------------------|----------------------------|----------------------|
| Service VPN tunnel online > | no secure connection initiated | > no secure remote access to | service target (machine) | | |
| | | show operator/location: All 0-9 | A-B C-D E-F G-H I-J K | <-L M-N O-P Q-R S- | -T U-V W-X Y-Z |
| active VPNs Berlin | Detroid Tokio | | | | |
| active VPN connections | active VPN connections to Service Targets | | | | |
| On this tab, you can see all Service Targets like facilities and machines currently connected with the mGuard Secure Cloud public via secure VPN. Reloading this page via 😰 immediately shows the current status of the VPN connections. | | | | | |
| 2 Operator: Detro | pid Mac | hine: Machine B | SN: 135866458557 | VPN: online | Start |

Figure 5.2: mGuard Secure Cloud public // Machine VPN online

Quick Start: Click on the green 'Start' button for the machine to be serviced.

Hint

Even if the machine has not yet established a VPN connection to the Secure Cloud, the green Start button can be clicked. A route to the machine will then be started and a VPN connection will be established automatically as soon as the VPN connection from the machine to the Secure Cloud has been established, e. g. by using a key switch.

Alternatively click on the machine to be serviced. The machine master card opens. Click on the green 'Start' button in the 'Connect workstation to this machine via VPN' field.

| ▼ 2 Operator: Detroid | Machine: Machine B | SN: 135866458557 VPN: online |
|-------------------------------|--------------------|---|
| Machine information | | Connect workstation to this machine via VPN |
| Туре: | Production Unit | Start Last machine connection: |
| Serial number: | 135866458557 | Comment: |
| Build year: | 1998 | |
| Manufacturer: | Innominate | 2015-06-08 16:12, ********@@innominate.com: testk |
| Supplier: | Phoenix Contact | |
| Manufacturing number: | 56686648552 | |
| Delivery day: | | |
| Location: | Berlin Adlershof | |
| Inventory number: | #558668 | |
| Cost center: | | click for new entry |
| Activation: | | |
| Software: | | |
| Notice: | | |
| | | |
| mGuard VPN client information | 1 | |
| Туре: | mGuard | |
| IP address: | 192.168.177.10 | |
| Firmware: | 8.3 | |
| Serial number: | 22896658 | |

Figure 5.3: mGuard Secure Cloud public // Machine information

The workstation is routed to the machine mGuard. The green 'Start' button changes to a red 'Stop' button.



All the status indicators (Service | Routing | Machine) are now green.

Machines, connecting from the internal network of the machine mGuard, can now be reached under their real IP address.

Result



A highly secure IPsec VPN connection between your mGuard VPN client of the service workstation and the mGuard VPN client of the machine has been established via the Secure Cloud.

Remote maintenance can now be performed with complete transparency and secure encryption using any required service tools.

6 Tariff upgrade

Administrators of customers of the mGuard Secure Cloud public in the EU can change their tariff at any time as follows:

| | Menu item | 'Administration' > Tab 'Account data' > Area 'Account status' | |
|--|-----------|---|--|
|--|-----------|---|--|

Your current tariff will be shown (here: Tariff 'Basic'). Initiate a tariff upgrade due to a click on the button 'Tariff upgrade'. All features and prices of the related tariff can be seen at:

| Menu item 'Administration' > Tab 'Prices' |
|---|
|---|

| or administration or 14 connections | Account data | Master data | Prices | Info & Downloads | Release Notes | |
|--|--------------|-------------|--------|------------------|-------------------------------|--|
| count management | | | | | | |
| | | | | | | |
| count status | | | | | | |
| | | | | | | |
| Tariff: | | | | | Basic | |
| Tariff: Service Seats: | | | | | Basic 2 | |
| Tariff: Service Seats: Machine connections (total): | | | | | Basic 2 unlimited | |
| Tariff: Service Seats: Machine connections (total): Machine connections (used): | | | | | Basic 2 unlimited 27 | |

Figure 6.1: Initiate tariff upgrade

| See administration VPN connections Account | a master data Prices into & Downloads Release Notes |
|---|---|
| account management | Upgrade |
| ccount status | Tariff Upgrade |
| Tariff: | An upgrade to Premium includes the order of the packages 'Premium Machine' and 'Premium Seat' (see 'Prices'). |
| Service Seats: | Please press 'OK' to upgrade to 'mGuard Secure Cloud Premium'. |
| Marking and Alama Arkets | |
| Machine connections (total): | |
| Machine connections (total): Machine connections (used): | |

Figure 6.2: Tariff upgrade message

After a successful tariff upgrade you will request a message with all relevant information via e-mail.

The following upgrade matrix shows the possible tariff uprades within the mGuard Secure Cloud public:

| Source tariff | Target tariff | Available upgrade packages of target tariff |
|---------------|---------------|---|
| Evaluation | Basic Edition | Basic Seat Package |
| Edition | | |
| Basic Edition | Premium | Premium Seat Package |
| | Edition | Premium Machine Package |
| Evaluation | Premium | Premium Seat Package |
| Edition | Edition | Premium Machine Package |

6.1 Request additional packages (mGuard Secure Cloud public Shop)

Enhancements for your tariff can be purchased with the 'Request packages' button which then opens the mGuard Secure Cloud public shopping cart.



Figure 6.3: mGuard Secure Cloud public // Request packages

The available enhancements for your tariff can be selected and requested within the mGuard Secure Cloud public shopping cart by clicking the button 'Request'.

7 Menu items



Figure 7.1: Status indicator: Service (VPN tunnel active/inactive) | Routing (performed/not performed) | Machine (available/unavailable)

7.1 'Service Targets (Machines)' menu item

Role: Admin

Provides all functions for setting up and administering service workstations.

Role: All users

Provides auxiliary functions for executing service tasks at the service workstation.

7.2 'Machines' menu item

Role: Admin

Provides all functions for setting up and administering operators/locations and their machines.

Role: All users

Provides all functions for selecting the relevant operator/location as well as initiating and executing service tasks on the relevant machine.

7.3 'Administration' menu item

Role: Admin

Provides all functions for mGuard Secure Cloud public administration.

| User administra- tion | overview/add/edit/delete users, assign and revoke roles and permission groups (self-defined permission groups: premium feature \star) |
|--------------------------|--|
| Access permissi- ons | overview/add/edit/delete permissions and permission groups (premium feature \star) |
| VPN-connection | overview/states of all VPN connections |
| Account data | current tariff/tariff change/request add. packages/overview |
| Master data | overview |
| Prices | overview available editions |
| Info & Downloads | notes on mGuard configuration/download VPN clients and manuals |
| Release Notes | information about the latest Secure Cloud version |

7.4 'Logbook' menu item

Role: Admin

Provides all functions for recording and analyzing service tasks.

| Functions | View monthly connection data |
|-----------|--|
| | Ad-hoc filtering and online analysis of connection data (premium feature \star) |
| | Download monthly connection data as CSV, XLS and PDF file (premium feature \star) |

| Analyses | 5 | | | | | | | |
|---------------------------------------|--|--|------------------------|------------------------------|---------------|---------------------|---|--------------------|
| Logbool | < Comparison of the second sec | | | | | | | |
| Service | Analyses | | | | | | | |
| Administra Premium- Basic tarii | ators can get the following re <i>Tariff:</i> Ad-hoc filtering of all s ff: monthly overview of all ser | ports: ervice activities and export vice activities. | of the generated repor | ts as csv, xls, or pdf file. | | | | |
| Hint: For I | egal reasons only data of the la | st 18 months are available. | | | | | | |
| Filter ★ | | | | | | | | |
| Date ra | ange | | | | | | | |
| last 3 | 0 days | ▼ V 23/0 | 5/2015 - 2 | 22/06/2015 | | | | |
| Opera | tor/l ocation | Serv | ice workstation | | Service targe | (machine) | | |
| opera | | Jerv | ice workstation | | -" | (machine) | | |
| all | | A all | | • A | all | | • | |
| Your rep | t XLS Export re | eport 🔺 | | | | | | |
| No. | PDF from \$ | Service until 🔶 | Service duration\$ | Operator/Location | \$ | Service workstation | ¢ | Service (machin |
| 1 | 22/05/2015 10:26:07 | 22/05/2015 10:26:08 | 00:00:01 | Berlin | | KBS_Service_1 | | Maschin |
| 2 | 22/05/2015 10:26:10 | 22/05/2015 10:29:47 | 00:03:37 | Berlin | | KBS_Service_1 | | Maschin |
| 3 | | | | | | | | |
| | 22/05/2015 14:13:36 | 22/05/2015 14:27:15 | 00:13:39 | Berlin | | KBS_Service_2 | | Maschin |

Figure 7.2: mGuard Secure Cloud public // Logbook

7.5 'Preferences' menu Item

Role: All users

Provides all functions for individual adjustments to the user's work environment.

 Function
 Change password

7.6 'Contact' link

Role: All users

Clicking on the 'Contact' link opens a contact form in a modal dialog box. Use this form to contact our mGuard Secure Cloud Support Team directly.

7.7 'Language' link

Role: All users

Click on the 'Language: German', 'Language: English' or 'Language: Italian' link to switch the UI language of the mGuard Secure Cloud public to English (EN), Italian (IT) or German (DE).

7.8 'Help & Support' link

Role: All users

Clicking on the 'Help' link opens a dialog box where you can open or download a version of the Quick Guide in PDF format in your selected language. The hotline phone numbers (Premium Edition) and e-mail addresses are also listed here.

8 Frequently Asked Questions (FAQs)

I have signed up for the Secure Cloud, but have not received a reply yet.

Since your registration data has to be checked carefully during normal office hours (Berlin time zone) by our Secure Cloud Service team, this process may take a while. The process is a preventive measure designed to stop untrustworthy individuals and institutions from registering and logging in.

How do I get functional VPN configurations without technical know-how?

Don't worry. With the support of the VPN Builder and its simple user guidance many questions can already be answered during configuration. If there are remaining questions, the 'Secure Cloud-Service' will be pleased to help you. Just contact our public hotline.



How can I contact the mGuard Secure Cloud public hotline?

Clicking on the link 'Help & Support' opens a dialog box where you can open or download a version of the Quick Guide in PDF format in your selected language. The hotline phone numbers (Premium Edition) and e-mail addresses are also listed here.

| and the second s | e.com Log out | |
|--|-----------------|--|
| | | Language: English Contact Help & Support |
| Administration | Logbook | Preferences |

Can I test the mGuard Secure Cloud public without obligation?

Of course. Following successful registration, every mGuard Secure Cloud *tenant* can test one service connection and one machine connection free of charge for 30 days (Premium features). Both VPN connections can be configured with the VPN Builder and tested thoroughly. When the test phase expires, the test connections can be converted into productive VPN connections on request. Please contact our Secure Cloud Service team for this.

Can I also use the mGuard Secure Cloud with other VPN products?

Unfortunately not. The mGuard Secure Cloud is currently only available for mGuard customers and users. The only exception is that service workstations may also be connected to the mGuard Secure Cloud via certified IPsec VPN clients.

How do I cancel individual contracts?

Contracts for VPN connections can be canceled for both service and machine connections on the relevant service workstation or machine master card by the 'Admin' and 'Masteradmin' roles at the end of each calendar year (area 'VPN administration').

| ✓ 2 Operator: Detroid | Machine: M | achine B | SN: 1358664585 | | VPN: online | | | * | | ¥ | |
|---------------------------------|---------------|--------------|----------------|----|--------------------|--------------|----------|----------|-----------|----------|---------|
| Machine information 🧳 | | | | C | Connect worksta | tion to this | s machir | ne via V | 'PN | | |
| Туре: | Production | Unit | | | Start | | Last | machine | conne | ction: | 0 |
| Serial number: | 135866458 | 557 | | | Comment: | | | | | | |
| Build year: | 1998 | | | | | | | | | | |
| Manufacturer: | Innominate | | | | 2015-06-08 16:1 | 2 HANAMAN | @innomi | nate.con | n: testko | ommentar | 8 |
| Supplier: | Phoenix Co | ntact | | | | | | | | | |
| Manufacturing number: | 566866485 | 52 | | | | | | | | | |
| Delivery day: | | | | | | | | | | | |
| Location: | Berlin Adle | shof | | | | | | | | | |
| Positioning data (Lat,Long): | 52.517036 | 5,13.3888599 | | | | | | | | | |
| Inventory number: | #558668 | | | | click for new entr | y | | | | | |
| Cost center: | | | | | | | | | | | |
| Activation: | | | | | | | | | | | |
| Software: | | | | | | | | | | | |
| Notice: | | | | | | | | | | | |
| mGuard VPN client information 🧳 | | | | VI | PN administrat | ion | | | | | |
| Type: m | Guard | | | | VPN connection: | | | | - Y | VPN Bui | ilder |
| IP address: 19 | 92.168.177.10 | | | | VPN configuratio | n: | | | • | Downloa | ad file |
| Firmware: 8. | 3 | | | | | | | | a | Delete | h |
| Serial number: 22 | 2896658 | | | | Last machine co | nnection: | | | 08/06/ | 2015 16: | 48:01 |

Why does the mGuard Secure Cloud public work with IPsec VPNs?

IPsec is acknowledged to be the most secure standard for VPN connections, it is ideal for site-to-site VPNs, and is already integrated in the future-proof IPv6 standard.

Where can I view my connection data?

The most relevant connection data is visible to the 'Admin' and 'Masteradmin' roles here:

| Menu item | 'Administration' | > VPN connections | : overview of all VPN | connections including status. |
|-----------|------------------|-------------------|-----------------------|-------------------------------|
|-----------|------------------|-------------------|-----------------------|-------------------------------|

| Service Routing | Machine | | | | | | |
|---|---|---|--------------------------------|--|--|--|----------------------------|
| ervice Targets (Machine | es) Service V | /orkstations | Administration | Loç | jbook | Preference | es |
| rvice VPN tunnel online | > no secure conr | ection initiated > no | secure remote acc | ess to service target (| machine) | | |
| User administration | Access permission | s VPN connections | Account data | Master data | Prices Info & | Downloads Rele | ease Notes |
| Administration | | | | | | | |
| /PN connections | | | | | | | |
| | | | | | | | |
| Hint: Only admins can add new (Machines)'. Only admins can add new Workstations'. | r machine VPNs unde r service workstation N | r the menu entry 'Service /PNs under the menu en | e Targets try ´Service | × | | | |
| Hint: Only admins can add new (Machines)'. Only admins can add new Workstations'. Service connections | r machine VPNs unde r service workstation \ | r the menu entry 'Service /PNs under the menu en | e Targets try 'Service | × Machine connect | tions | | |
| Hint: Only admins can add new (Machines)". Only admins can add new Workstations". Service connections Service name | v machine VPNs unde v service workstation \ A Status | r the menu entry 'Service /PNs under the menu en | e Targets try 'Service ♦ | × Machine connect | tions ♦ Status | Order da | ate 🗢 |
| Hint: Only admins can add new (Machines)". Only admins can add new Workstations". Service connections Service name KBS-Detroid | v machine VPNs unde v service workstation V Status active | r the menu entry 'Service /PNs under the menu en Order date 01/06/2015 | e Targets try 'Service ♦ | X Machine connect Machine name Machine B | tions Status active | Order da 22/05/20 | ate ◆ 15 |
| Hint: Only admins can add new (Machines)'. Only admins can add new Workstations'. Service connections Service name KBS-Detroid KBS_Service_2 | v machine VPNs unde v service workstation N Status active active | r the menu entry 'Service /PNs under the menu en • Order date 01/06/2015 27/05/2015 | e Targets try 'Service ♦ | Machine connect Machine name Machine B Machine C | Status active active | Order da 22/05/20 26/05/20 | ate ◆ 115 115 |
| Hint: Only admins can add new (Machines)". Only admins can add new Workstations". Service connections Service name KBS-Detroid KBS_Service_2 KBS_Service_4 | machine VPNs under service workstation 1 service workstation 1 active active active | r the menu entry 'Service /PNs under the menu entry • Order date 01/06/2015 27/05/2015 26/05/2015 | e Targets try 'Service ♦ | Machine connect Machine name Machine B Machine C Maschine-Adlers | tions Status active active hof active | Order da 22/05/20 26/05/20 22/05/20 | ate ◆ 15 15 |

Which Software VPN clients are supported by the mGuard Secure Cloud public?

Currently we support the following IPsec Software VPN clients for service workstations:

- mGuard Secure VPN Client: <u>http://www.innominate.com/</u>
- Shrew Soft: <u>http://www.shrew.net/</u>

I have entered my login data correctly but still can't log into the Cloud.

Please make sure that your browser accepts cookies for the address <u>https://de.cloud.mguard.com</u> (respectively <u>https://us.cloud.mguard.com</u> or <u>https://it.cloud.mguard.com</u>).

| Cookie settings for InternetToolExplorer:hand | s > Internet options > Privacy > if you want to have automatic cookie ling, set the slider to ´Medium´. |
|---|--|

| Cookie Settings for Google | Menu > Settings > Show advanced settings >Privacy > Content settings > |
|----------------------------|--|
| Chrome: | Cookies > set 'Allow local data to be set (recommended)'. |

9 Known limitations

Currently there are no known issues for our customers.

10 Service for mGuard Secure Cloud customers

Clicking on the link 'Help & Support' opens a dialog box where you can open or download a version of the Quick Guide in PDF format in your selected language. The hotline phone numbers (Premium Edition \star) and e-mail addresses are also listed here.

| | inviting@innominate.com Log out | 2.3.0-pre08-beta06-rc4 |
|---|---|--|
| mGuard | secure cloud public | Language: English Contact Help & Support |
| Service Routing Machine | Help & Suppo | ort × |
| Service Targets (Machines) Service Works | Here you'll find the current Quick Guide (pdf). | |
| | Open the mGuard Secure Cloud Quick Guide: English (PD | F) * |
| Service VPN tunnel online > no secure connection | Our mGuard Secure Cloud public hotline is reachable from Mon December 24th and 31st) from 9:00h am - to 5:00h pm as follow | day to Friday (except public holidays and s: |
| | e-mail: 11 300 an winght a apres of in | phone: >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |
| active VPNs Berlin Detroid Tokio | * You'll get the necessary pdf reader for free at Adobe. | |
| active VPN connections to Service Targe | | |
| On this tab, you can see all Service Targets lik via 🝘 immediately shows the current status | Close | |
| 2 Operator: Detroid | Machine: Machine B SN: 1358664 | 158557 VPN: online Start |

11 Publisher

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