

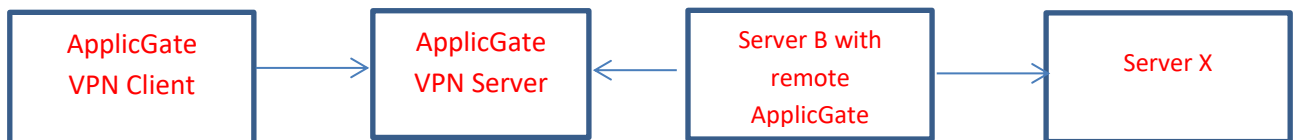
ApplicGate Remote Service Platform (RSP) Wizard

1 Introduction

The RSP Wizard has following goals:

- Easy definition of RSP-Projects.
- The definition of RSP-Projects can be delegated to authorized users (key users).
- Minimum training effort to enable key users creating and modifying RSP-Projects.
- IP addresses and UID-numbers are managed automatically.

2 Network Schema



- VPN Client and Server B must log on to the VPN Server.
- Server B forwards connections from the VPN client to Server X.

3 Configuration of ApplicGate VPN Server

There are various configuration options available:

Additional documentation about certificates, shortcuts etc. can be found in

<https://download.applicgate.com/download/ApplicGate-VPN-Client.pdf> .

3.1 Necessary Keywords to use the RSP Wizard

3.1.1 Keyword PRJSET for Project Settings

- Keyword **PRJSET** in “manage” or “status” routing entries
PRJSET:UIDprefixes!remoteEmail!MCHKvalue
-- UIDprefixes ... List of letters or strings, separated by | for selection of prefixes during UID generation, e.g. S|T, default is S
-- remoteEmail .. trailing part of email address to generate an email address for the certificate of remote computers, e.g. [.rsp@testcomp.com](mailto:rsp@testcomp.com) (this is the default)
---- The email address will be built as follows: UIDprefix+serialNo+remoteEmail
---- e.g. S120.rsp@testcomp.com
---- serialNo starts with 100 and will be incremented automatically
-- MCHKvalue ... Value for keyword MCHK to check email syntax, default is *
---- see <https://help.applicgate.com/helpmeGU.htm>

Example: PRJSET:S|T!.rsp@testcomp.com!*@applicgate.com|*@testcomp.com

UID will be generated: S100, S101, S102, T100, S103, T101 ...

3.1.2 Keyword PRJUPD to define site specific Key Users

- Each project is associated to a „**Management Location**”.
- Key users can be defined for each management location. These key users may manage all projects associated to this management location (creation of projects and updates).
- Keyword **PRJUPD** in “manage” or “status” routing entries to allow access to the RSP wizard.
PRJUPD:groupelist ... List of special groups (group name must start with "A_"), separated by |
Example: PRJUPD:A_PW1|A_PW2

Each group contains one or more entries (separated by ,) with following format:

List of email addresses (separated by |) :W: List of management locations (separated by |)

Email addresses may contain one or more * for wildcard, e.g.

*@aon.at, ab*x@mycompany.com, *.mgmt.*@x.com.

Example: [*.mgmt@applicgate.com|mike@mycompany.com:W:Linz|Vienna](#)

In manage routing entries the keyword PRJUPD does not need any parameter because all management locations may be selected.

If a new management locations has been defined, the routing table must be reloaded.

- The selected management location is a parameter in the keyword UIDN.

3.1.3 Keyword IPSTART to define Start IP Address (optional)

- Keyword **IPSTART**, system setting (only if GatewayIP2=manage):
IPSTART:IPv4address
-- Start address for new routing entries generated by the RSP wizard.
-- The second number must be even.
-- The default value of IPSTART is 127.2.1.0
-- A new address is next the next higher address after IPSTART or any used address out of 127.x.x.x (whichever is higher).

3.1.4 Keyword GRPUPD

- Keyword GRPUPD must be defined in “manage” or “status” routing entries to enable update of groups via the web interface.

3.2 Configuration Files

3.2.1 Example of Routing Table (routing.csv)

```
SourceIP;GatewayIP;GatewayPort;GatewayIP2 ;DestinationIP;DestinationPort;Expiration;Type ;UID ;Comment ;eMail
* ;127.0.0.1;98 ;manage ; ; * ;TINT:5,LGS,FLG:yes,BPRI:AboveNormal, REFRH,REFRU,LOG:1, GRPUPD,RTUPD, PRJSET:S|T!.rsp@testcomp.com!*, PRJUPD ;MGMTloc ;Mgmt local ;admin@testcomp.com
* ;* ;99 ;manage ; ; * ;SSL:vpn.testcomp.com.pfx/vptest, REFRH,REFRU,LOG:1, GRPUPD,RTUPD, CCR:Mgmt, PRJSET:S|T!.rsp@testcomp.com!*, PRJUPD ;MGMT ;Mgmt ;
* ;* ;999 ;status ; ; * ;SSL:vpn.testcomp.com.pfx/vptest, REFRH,REFRU,LOG:1, GRPUPD, CCR:A_RSP, PRJSET:S|T!.rsp@testcomp.com!*, PRJUPD:A_RSP;ProjMGMT ;ProjMgmt ;
* ;* ;441 ;reverselogon;R1|R3|mgmt ; * ;SSL:vpn.testcomp.com.pfx/vptest, CCR:*rsp@testcomp.com, ISS:"CN=TestComp" ;VPNSRV ;VPN Server Logon ;
* ;* ;442 ;reverselogon;client|mgmt ; * ;SSL:vpn.testcomp.com.pfx/vptest, CCR:user*@testcomp.com, ISS:"CN=TestComp" ;VPNC ;VPN Client Logon ;
```

Routing Table last loaded 2024-06-12 15:13:54, last written 2024-06-12 15:13:49

ID	Listening	Source IP	Gateway IP	Gateway Port	Gateway IP2	Destination IP	Destination Port	Expiration	Type	UID	Comment
2	true	*	127.0.0.1	98	manage	*	*	*	TINT:5,LGS,FLG:yes,BPRI:AboveNormal, REFRH,REFRU,LOG:1, GRPUPD,RTUPD, PRJSET:S T!.rsp@testcomp.com!*, PRJUPD	MGMTloc	Mgmt local
3	true	*	*	99	manage	*	*	*	SSL:vpn.testcomp.com.pfx/vptest, REFRH,REFRU,LOG:1, GRPUPD,RTUPD, CCR:Mgmt, PRJSET:S T!.rsp@testcomp.com!*, PRJUPD	MGMT	Mgmt
4	true	*	*	999	status	*	*	*	SSL:vpn.testcomp.com.pfx/vptest, REFRH,REFRU,LOG:1, GRPUPD, CCR:A_RSP, PRJSET:S T!.rsp@testcomp.com!*, PRJUPD:A_RSP	ProjMGMT	ProjMgmt
5	true	*	*	441	reverselogon	R1 R3 mgmt	*	*	SSL:vpn.testcomp.com.pfx/vptest, CCR:*rsp@testcomp.com, ISS:"CN=TestComp"	VPNSRV	VPN Server Logon
6	true	*	*	442	reverselogon	client mgmt	*	*	SSL:vpn.testcomp.com.pfx/vptest, CCR:user*@testcomp.com,ISS:"CN=TestComp"	VPNC	VPN Client Logon

Detailed description:

ID 2: The first entry defines the local **management** interface:

Accessible via <http://127.0.0.1/98>.

In the Type field the keyword TINT defines the internal timer interval with 5 seconds, LGS enables logging of sessions (one line per session with start time, duration etc.), FLG enables logging to the general log file, BPRI sets the priority of ApplicGate, REFRH defines the refresh rate of the Home window, REFRH defines the refresh rate of the UID list, LOG defines the logging level, GRPUPD and RTUPD allow updates of group.csv and routing.csv via the web interface, PRJSET defines the project settings, PRJUPD enables the RSP wizard for all management locations.

ID 3: The second entry defines the remote **management** interface (optional):

Accessible via all network interfaces via <https://vpn.testcomp.com:99> (the DNS name for vpn.testcomp.com must have been defined).

The Type field defines the server certificate via the keyword SSL. Authentication via client certificates is requested by keyword CCR. This keyword refers to the group Mgmt with email addresses where access is granted, PRJSET defines the project settings, PRJUPD enables the RSP wizard for all management locations.

ID4: This routing entry allows key users to manage RSP projects via the RSP wizard:

Accessible via all network interfaces via <https://vpn.testcomp.com:999>

Access rights and management locations are defined by the group A_RSP. This group is an argument in the keywords CCR and PRJUPD.

ID 5: Allows logon of servers where the email in the certificate matches *rsp@testcomp.com .

Accessible via all network interfaces via TCP port 441.

Rules R1 and R3 offered by the remote servers are accepted.

ID 6: The **reverselogon** entry defines how the clients log on to the ApplicGate VPN server:

Accessible via all network interfaces via TCP port 442.

The field DestinationIP defines the supported functions: client (download rules to the client) and mgmt (optional, allows management of the client via the VPN Server).

The Type field defines the server certificate, the keyword CCR requests client certificates (all certificates with email address ending with @testcomp.com are allowed) and the certificate issuer must match as defined in the keyword ISS.

3.2.2 Example of Groups Table (groups.csv)

```

GroupName ;IPranges ;Comment ;eMail ;Expiration
License ;* mycomputer mycompany 0K01b345cgthwrhwgve...8UjCsaNTu ;License ;*
Title ;ApplicGate VPN Server ; ;*
A_RSP ;manager1@testcomp.com|manager2@testcomp.com:W:London|Vienna;RSP project management;;
Mgmt ;*.mgmt@testcomp.com ;Management; ;*

```

View of the groups via ApplicGate management:

Groups last loaded 2024-06-12 14:55:39, last written 2024-06-12 14:55:33

ID	Name	Group Data: IP Ranges and Addresses etc.	Comment	eMail	Expiration
2	License	* 127.0.0.1 ;98 ;manage ;*	License		*
3	Title	ApplicGate VPN Server			*
4	A_RSP	manager1@testcomp.com manager2@testcomp.com:W:London Vienna	RSP project management		*
5	Mgmt	*.mgmt@testcomp.com	Management		*

Detailed description:

- **License** defines the license which can be obtained via www.applicgate.com.
- **Title** defines the title for the management interface.
- **A_RSP** Used in keyword **PRJUPD** to define access rights for the RSP Wizard.
- **Mgmt** is used for remote management.

3.3 Installation of ApplicGate at the VPN Server

For installation on Windows see: <https://help.applicgate.com/helpmeST.htm>

For installation on Linux see: <https://help.applicgate.com/helpmeSX.htm>

Chose the installation option **RSPvpnServer** and adapt the routing table and the groups table via web interface or use an editor as necessary.

4 Configuration of Remote ApplicGate (Server B)

4.1 Example of Routing Table (routing.csv)

Two „incoming“ routing entries must be defined at the remote ApplicGate installation.

- GatewayIP=R1, GatewayIP2=manage
- GatewayIP=R3, Type=PRX

Example:

```

SourceIP ;GatewayIP ;GatewayPort;GatewayIP2;DestinationIP;DestinationPort;Expiration;Type ;UID;Comment ;eMail
* ;127.0.0.1 ;98 ;manage ;* ;* ;* ;RTUPD,GRPUPD, LGS, BPRI:AboveNormal, FLG:true,TINT:10 ;MGL;Manage local ;
autologon ;R1|R3|mgmt ;* ;* ;vpn.testcomp.com;441 ;* ;UPDATE, SSLTARGET:vpn.testcomp.com!s100.rsp@testcomp.com.pfx/s100rsp,
RETRY:20s,TTL:325s ;AL ;Autologon ;
incoming ;R1 ;* ;manage ;* ;* ;* ; ;MGR;Manage remote ;
incoming ;R3 ;* ;* ;* ;* ;* ;PRX ;PRX;Incoming Proxy ;

```

View of the routing entries via ApplicGate management on ServerB:

Routing Table last loaded 2024-06-12 17:12:17, last written 2024-06-12 17:12:17

ID	Listening	Source IP	Gateway IP	Gateway Port	Gateway IP2	Destination IP	Destination Port	Expiration	Type	UID	Comment
2	true	*	127.0.0.1	98	manage	*	*	*	RTUPD,GRPUPD, LGS, BPRI:AboveNormal, FLG:true,TINT:10	MGL	Manage local
3	true	autologon	R1 R3 mgmt	*	*	vpn.testcomp.com	441	*	UPDATE, SSLTARGET:vpn.testcomp.com!s100.rsp@testcomp.com.pfx/s100rsp, RETRY:20s, TTL:325s	AL	Autologon
4	true	incoming	R1	*	manage	*	*	*		MGR	Manage remote
5	true	incoming	R3	*	*	*	*	*	PRX	PRX	Incoming Proxy

ID 2: Local Management

ID3: Via the autologon entry Server B logs on to the VPN Server and identifies itself using a certificate (email: s100.rsp@testcomp.com)

RETRY ... interval in seconds to retry connections in case of error

TTL ... Time To Live in seconds: Sends keepalive messages about every 30 seconds (if actual TTL is below 3 minutes)

ID 4: Remote management of ApplicGate at Server B via rule R1

ID 5: Proxy access via rule R3

4.2 Installation of ApplicGate

For installation on Windows see: <https://help.applicgate.com/helpmeST.htm>

For installation on Linux see: <https://help.applicgate.com/helpmeSX.htm>

Chose the installation option **RSPremote** and adapt the routing table and the groups table via web interface or use an editor as necessary.

5 Creation of new RSP Projects

RSP projects are managed via a web interface at the ApplicGate VPN Server.

5.1 Form 1

Basic data for the project:

The screenshot shows the 'ApplicGate VPN Server' web interface. The main heading is 'New RSP Project'. The form contains the following fields and options:

- UIDprefix: (dropdown)
- Project Name:
- Managed by location: (dropdown)
- Responsible:
- Number of computers: (dropdown)
- Maximum number of optional protocols per computer: (dropdown)

Buttons: Cancel, Next

Further instructions how to fill this form can be found [here](#).

The sidebar menu on the left includes: Home, Configuration, and a dropdown menu with options like 'New RSP Project'.

Description of fields:

- **UIDprefix**
Selection options are defined by the keyword PRJSET in "manage" and "status" routing entries. UID will be generated automatically, e.g. S344
- **Project Name ... UIDname:** used to construct name of default group (blanks are replaced by _)
- **Managed by location: ...** The creator of the project must be authorized for this location. The selection options are defined by the keyword PRJUPD.
- **Responsible:** The creator of the project will be suggested as responsible person. Additional persons can be defined (list separated by ,). But only key users for this location may change the configuration of the project.
- **Number of computers:** 1- 20
- **Maximum number of optional protocols per computer:** 0-5

By clicking the button „Next“, form 2 will be shown.

5.2 Form 2

The second form allows entry of all other data necessary for the project.

ApplicGate VPN Server

UID: Snnn UIDname: Test
Responsible: reinhold.leitner.mgmt@applicgate.com
Managed by location: Linz
Email in certificate of remote ApplicGate: snnn.rsp@testcomp.com

Authorized Users, Group Snnn_Test:
reinhold.leitner.mgmt@applicgate.com

Customer IP	Customer Computername	Remote ApplicGate	Network Share	RDP	Ultra VNC	Oracle	Optional Protocol 1 TCP Port	Shortcut	Comment
<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Further instructions how to fill this form can be found [here](#).

- For keyword UIDN following data are requested:
AuthorizedUsers ... List of authorised users
These email addresses will be stored into the group *UID_UIDname*
- Data for the remote computer (customer):
IP or DNS name
Computername
- Rule to manage remote ApplicGate installation (mandatory at the first computer):
- A management rule via remote rule R1 will be generated, keyword LISTEN will be defined.
- For all other rules the remote rule R3 und *CONNECT:ipadresse:port* will be used:
If the shortcut is a file name, the second part of the UID will be put in front of the shortcut:
e.g. 011.Computername.bat

Function	Mode	TCP-Port	Shortcut	Comment
Remote ApplicGate	Checkbox	88	http://*/home	<i>Computername (IP) Management</i>
Network Share	Checkbox	445	<i>Computername.bat</i>	<i>Computername Network Share</i>
RDP	Checkbox	3389	<i>Computername.rdp</i>	<i>Computername RDP</i>
Ultra VNC	Checkbox	5900	<i>Computername.vnc</i>	<i>Computername UltraVNC</i>
Oracle	Checkbox	1521	<i>Computername.ora</i>	<i>Computername Oracle</i>
Optional Protocol	Userdefined values	<i>userdefined</i>	<i>userdefined</i>	<i>Computername userdefined comment</i>

- Local IP-Addresses will be incremented automatically.
See also the definition of keyword IPSTART above.
- Expiration: 1 year after creation (first day of next month)

5.3 Upload of Project Definition

As an alternative the project data can be uploaded via a .csv file (Form1 and Form2 will be filled):

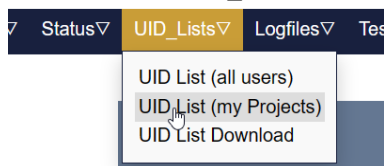
Hint:

You can download the [Excel template](#), fill in the data, export the file .csv formatted and upload the .csv file. Further instructions can be found [here](#).

See also <https://help.applicgate.com/helpmePU.htm> .

6 Maintenance of RSP Projects

- Configuration changes are allowed only by the key users, if they have rights for the specific management location.
- Within menu „UID_Lists“ the item „UID List (my Projects)“ will be shown.



The UID List shows all projects that can be administrated:

UID List (my Projects: reinhold.leitner.mgmt@applicgate.com) last changed Wed, 01 May 2024 16:23:41

New	New	UID	UIDname	Users	Responsible	Management Location	Expiration
Routes	Group	S100	Site B	S100_Site_B	manager@testcomp.com	Linz	2025-05-01
Routes	Group	S101	NewProject	S101_NewProject	x@x.com	Linz	2025-05-01

- Buttons to create new routes and new groups will be shown.

6.1 Update of Routing Entries

- By clicking a UID (see example above) the routing table will be shown (full display) with a hyperlink in field ID for update and delete:

Routing Table (UID: S100, UIDname: Site B) last loaded 2024-05-02 00:14:45, last written 2024-05-02 00:14:45

ID	Listening	Source IP	Gateway IP	Gateway Port	Gateway IP2	Destination IP
7	true	S100_Site_B, Mgmt	127.2.1.2	88	forward	s100.rsp@testcomp.com:R1%B4AE-4
8	true	S100_Site_B	127.2.1.2	445	forward	s100.rsp@testcomp.com:R3

- Following fields may be changed: SourceIP, GatewayPort, Type, Shortcut, Comment, eMail or the entry can be deleted.

6.2 Update of Groups

- By clicking a UIDname all groups of a project be shown (group name must start with "UID_"):

UID List (my Projects: reinhold.leitner.mgmt@applicgate.com) last changed Fri, 03 May 2024 16:23:41

New	New	UID	UIDname	Users	Responsible	Management Location	Expiration
Routes	Group	S100	Site B	S100_Site_B	manager@testcomp.com	Linz	2025-05-01
Routes	Group	S101	NewProject	S101_NewProject	x@x.com	Linz	2025-05-01

- With a hyperlink in field ID for update and delete:

Groups last loaded 2024-05-03 16:23:41, last written 2024-05-03 16:23:41

ID	Name	Group Data: IP Ranges and Addresses etc.	Comment	eMail	Expiration
S100_Site_B		manager@testcomp.com, user*@testcomp.com	MCHK:*	manager@testcomp.com	*

6.3 Deletion of a Project

- Deletion of a project (i.e. routing entry with keyword UIDN) is allowed only via „manage“ routing entries.

6.4 Change of Project Lifetime

- The expiration field in routing entries may be changed only via „manage“ routing entries.

7 Lock of Configuration

- Configuration updates via web-Interface can be enabled and disabled via „manage“ routing entries.

To avoid access conflicts, it is necessary to disable updates via web, while routing or group .csv files are changed by an editor program.

Home Configuration▼ Status▼ UID_Lists▼ Logfiles▼ Test▼ Tools▼ Help▼ Stop & Restart▼

Web Update Lock:
 Updates via web interface are not locked.
[Lock](#) web updates

- Show Groups, Routes & Status
- Lock/Unlock Web Updates
- Syntax Check
- Log Files

8 Management of ApplicGate VPN Servers by VPN Clients

At the VPN server access rights for management must be defined at the reverselogon routing entry:

Keyword SRVM:EmailAddresses ... grants manage rights

Keyword SRVS:EmailAddresses ... grants status rights

Then (if an autologon session is active) a menu item will be shown, that allows the management of the VPN server:

“Central Server *Name* Management“ or “Central Server *Name* Status“

Example:

es▼ Test▼ Tools▼ Help▼ Stop & Restart▼

20:25:55 GMT

- Central Server **VM2** Management
- Show Groups, Routes & Status
- Lock/Unlock Web Updates

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