



Secure Remote Access

Remote Desktop Application for SecuriCDS® ZoneGuard

RDP Application for SecuriCDS ZoneGuard offers secure remote access capabilities. The ZoneGuard based technology provides secure access to protected networks like ICS/SCADA environments or classified systems. The RDP Application for SecuriCDS ZoneGuard is a data loss prevention and an intrusion prevention solution which enables secure remote access use cases.



Enabling access to systems

Connecting systems or networks of different security levels, where one of the systems may be untrusted and outside the organisational control poses a great security risk. Today's advanced attack methods requires that attack surfaces are reduced and permitted remote access methods are limited. Stopping malicious code from entering the protected network or stopping any sensitive information from leaving the protected network will be hard if these threats are not handled with care.

ZoneGuard's RDP Application employs a well-defined information access methodology to reduce attack exposure. It safe-guards both the confidentiality and integrity of the interfaced systems by:

- transforming the Remote Desktop Protocol stream into single bitmap images, keystrokes and mouse movements at the cross domain point.
- validating the bitmap images, the keystrokes and the mouse movements to ensure correct information types.
- applying flexible filters, e.g. noise on the images, adding variables to mouse movement or restricting valid keystroke codes.

Typical use cases include:

- providing secure access to several different systems in diverse security domains from a single computer.
- enabling users in a protected network to access resources in a lower classified network including Internet.
- safe guarding jump servers and providing secure remote access for suppliers of equipment or off-site consultancy.



ZoneGuard technology

ZoneGuard Platform uses ZoneGuard technology to achieve secure information exchange between two separate systems. It reduces potential attack vectors by a validation of the information which ensures that content and structure is in accordance with a defined information policy.

Validation of information

The information within the network data is always controlled using full message inspection. With ZoneGuard, there is no risk that partial network data and information bypasses validation.

Unique information policy enforcement

ZoneGuard safeguards which information that will be passed on to the receiving network. The policy controlling the vital validation of information is defined by the organisation and based on their specific needs and internal or external regulations.

Advantages

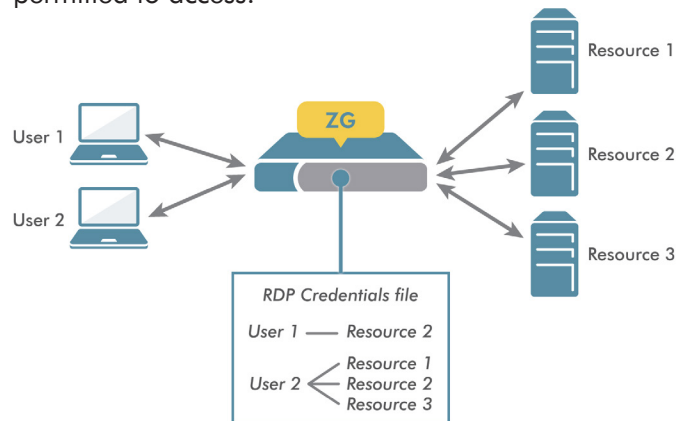
- Supports multiple resources or servers with granular access based on the logged in user
- Termination of the RDP protocol in the cross domain point
- Limits and secures the comprehensive RDP protocol to reduce attack surfaces
- Takes full control of information passing between systems and/or security domains
- Fulfilment of internal and regulatory requirements
- Eliminates “what ifs”
- Role based system with separation of duties

Technical Brief

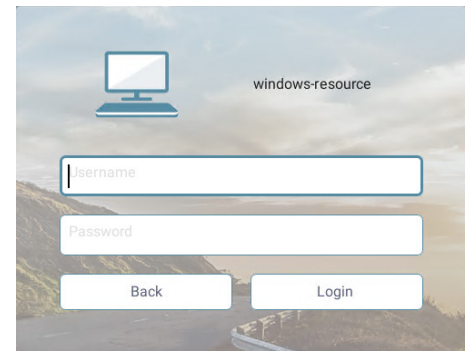
- Protocol support: Subset of RDP. Note that the complete Remote Desk Protocol is not supported due to security aspects.
- Supports up to 10 simultaneous users at resolution 1600x800
- Stand-alone RDP Credentials Generator application included to create users and connect resources to the users
- The administrator can change the internal filter to white list or black list mouse movement or keystrokes using ZoneGuard’s CDS Configuration Application
- Requires SecureCDS ZoneGuard Platform

Multiple resources and user handling

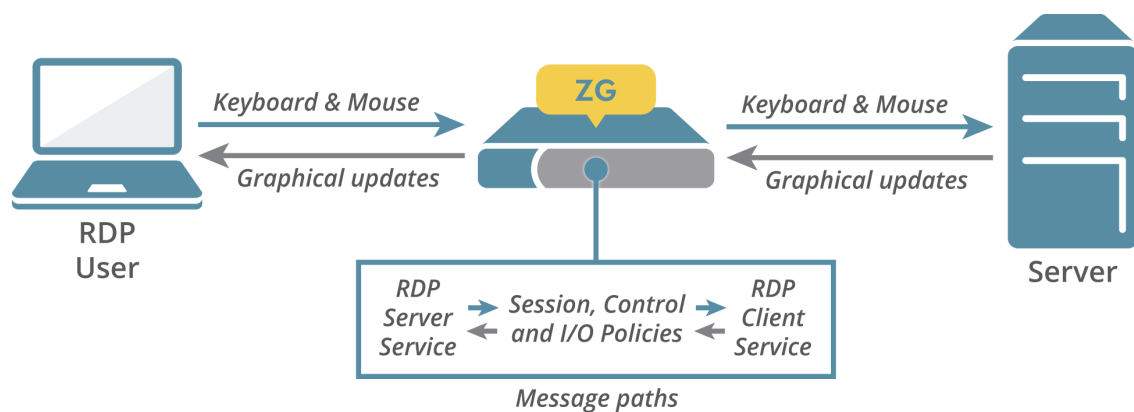
The RDP Application supports multiple resources or servers on the protected network. Users are defined using a RDP Credentials Generator application which also sets which resources the user is permitted to access.



Users trying to establish an RDP connection to the ZoneGuard device will be validated and displayed with a list of allowed resources to access. To establish a connection to a resource, the resource specific credentials must be entered by the user.



RDP Application user login screen



SecuriCDS ZoneGuard Platform overview