WATERFALL

Stronger Than Firewalls

WATERFALL REMOTE SCREEN VIEW

SAFE REMOTE SUPPORT

Remote access to industrial control networks is both essential and dangerous. Most industrial sites need to call on external experts from time to time for business necessity and convenience. Remote access is dangerous for control systems security however. Conventional remote access technology, even 2-factor systems, VPNs and firewalls are software, and all software can be hacked.

Waterfall Remote Screen View (RSV) provides safe remote access for vendors of all levels of clearance for a site. RSV enables remote experts to see the screens of computers on industrial networks while the industrial site retains full control over any expert-recommended manipulations or changes to that system. Physical protections built into the underlying Unidirectional Gateway hardware mean that no software compromise can impair the protection provided to the industrial networks.

The Waterfall RSV provides maximum viewing versatility needed for effective monitoring and operational processes evaluation. It enables multiple users to remotely view, in real time, multiple screens located inside the industrial network. Different users located in distant locations, can view multiple screens simultaneously.

Waterfall RSV is an easy to install and maintain COTS solution, which does not require any software installation. Users can access the screen feeds in standard web browsers.

BENEFITS OF WATERFALL REMOTE SCREEN VIEW

Safe remote support for unidirectionally-protected networks

Enables "escorted remote access" for vendor support

Elimination of remote control cyberattacks and online malware propagation

Facilitating compliance with NERC CIP, NIST, CFATS, ANSSI, UK DfT and more

Usable from standard web browsers with no client software required

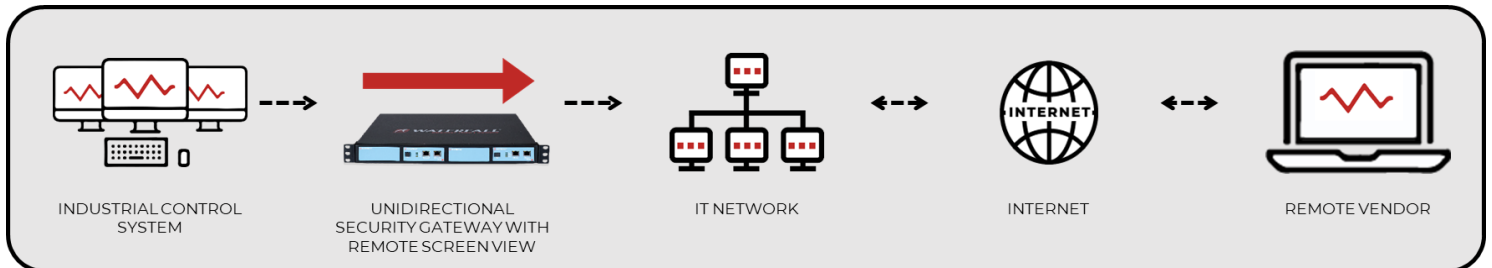Rails   Oil & Gas   Manufacturing   Water   Power   Pharma

THEORY OF OPERATION

INDUSTRIAL CONTROL SYSTEM → UNIDIRECTIONAL SECURITY GATEWAY WITH REMOTE SCREEN VIEW ⇠⇢ IT NETWORK ⟷ INTERNET ⟷ REMOTE VENDOR

The diagram above depicts a common use case where the ICS network is safely connected to the IT network through a Unidirectional Security Gateway. In addition, the Waterfall Remote Screen View solution allows remote vendors full visibility of operational network screens without compromising the protected network: viewing multiple screens in real-time on standard browsers, connecting to a web server replica running through the gateway, providing advice and guiding site personnel over the phone, and more.

The Waterfall RSV uses an internal, hardware based, unidirectional fiber optic link to replicate the contents of server and workstation screens from industrial networks to corporate networks or other external networks, in real time. The Unidirectional hardware makes it physically impossible for data to flow from the corporate network towards the industrial network, eliminating any threats of cyber-attacks, incoming malware or human errors. Users continue to operate as if nothing has changed: Waterfall's real-time screen feeds are accessed through a conventional web browsers.

The Waterfall RSV solution is routinely used for remote vendor personnel, such as call center personnel, to enable viewing of screens on critical computers and provide advice to site personnel in the diagnosis and repair of fault conditions. Remote vendor personnel can provide advice over the phone, without having direct access to critical equipment.

FULLY-FEATURED & ROBUST SUPPORT:

» Screens from industrial computers are visible in external networks

» Screens are accessed by conventional browsers and video streaming

» Supports Windows OS

» Comprehensive diagnostics including real-time alerts to fault conditions via email, SNMP, log files and PI tags

» Broad manageability & control of replicated screens including refresh rate, video quality and activation mode

» SCADA managers can configure the Waterfall RSV to stream screens on demand

INFO@WATERFALL-SECURITY.COM | **WWW.WATERFALL-SECURITY.COM**

ABOUT WATERFALL SECURITY SOLUTIONS

Waterfall Security Solutions is the global leader in industrial cybersecurity technology. The company's expanding portfolio of customers includes national infrastructures, power plants, nuclear plants, offshore oil and gas facilities, rail transport, refineries, manufacturing plants, utility companies, and many more. Deployed throughout North America, Europe, the Middle East and Asia, Waterfall products support the widest range of leading industrial remote monitoring platforms, applications, databases and protocols in the market. Please contact: info@waterfall-security.com