



Shadow Select

Strategic and tactical lawful interception

Roke's Shadow Select is a refreshed, full-featured Lawful Intercept system which includes complex breach prevention controls and tasking management, as well as highly flexible probes. It has been field proven for over 15 years and is trusted by operators and governments across the globe. Supporting the investigation of serious crime and terrorism, it offers unparalleled, intuitive access to high-end telecommunications exploitation either individually or combined into a seamless integrated operational system.

BENEFITS

- Track multiple target movements and communications without the need for mobile covert surveillance teams
- COTS technology keeps costs low and decreases time between upgrades and new features
- Covert equipment with small footprint and low power requirements increases deployment options
- Scalable, flexible and capable of virtualisation, providing a solution that can adapt based on your changing requirements

FEATURES

- Highly scalable solution with >4000 intercept access points supported
- On-switch and off-switch options
- 1G, 10G and 100G probes
- Ultra-low latency with options to integrate active technology
- Capability to select targets using any of the major telecommunications identifiers or a flexible string search algorithm
- Full range of breach detection and prevention mechanisms to ensure compliance with local legal requirements
- True wire-speed access up to 100Gbps
- Field-proven 99.99% availability
- Full remote upgrade capability - minimising operational costs and down-time, for in-service upgrade



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System Types	Scaling
On switch <ul style="list-style-type: none"> Extensive on-switch capability Off-switch <ul style="list-style-type: none"> 2 x 100Gbps or 8 x 10Gbps Hawk Probes 1U COTS high performance server probe 3U discreet secure cabinet option IP filtering at wire-speed concurrently on all available 10G intercept interfaces for typical data centre traffic profiles 	Modular, scalable and highly capable solution with up to: <ul style="list-style-type: none"> 4,000 intercept points 5,000 targets 30,000 simultaneous intercepted sessions
Flexible Targeting	
IPv4 and IPv6 Address Targeting: <ul style="list-style-type: none"> Match on source and/or destination IP addresses Full support for IPv4 network masks and IPv4 prefix lengths Full support for IPv6 network masks and IPv6 prefix lengths Matches can be combined with IP Protocol ID and UDP/TCP port numbers Support for IP tunnelling (i.e. IPv4-in-IPv6 and IPv6-in-IPv4) 	MAC Address Targeting: <ul style="list-style-type: none"> Match on source and/or destination Ethernet MAC addresses
Keyword String Targeting: <ul style="list-style-type: none"> Match on case sensitive, case insensitive and binary strings Matches can trigger single packet delivery or 5-tuple flow delivery 	GTP Targeting: <ul style="list-style-type: none"> Intercept GTP-U traffic based on targeted GTP-C signalling traffic Target on MSISDN, IMSI or IMEI identifiers Support for GTP-C v0, v1 and v2 protocols
E-mail Targeting: <ul style="list-style-type: none"> Support for SMTP, POP3 and IMAP4 protocols Target on e-mail full address, domain address or user names 	SIP Targeting: <ul style="list-style-type: none"> Intercept RTP/RTCP flows based on targeted SIP signalling traffic Target on SIP address, E164 number or Text ID attributes
	RADIUS Triggered Targeting: <ul style="list-style-type: none"> Trigger IPv4/IPv6 flow interception based on targeted RADIUS AAA messages Flexibility to target on any RADIUS attribute
Layer 2 Support	Delivery
<ul style="list-style-type: none"> Ethernet II (DIX), IEEE 802.3 and IEEE 802.2 LLC/SNAP header skipping VLAN 802.1q and 802.1ad (QinQ) header skipping MPLS label skipping PPPoE header skipping Custom header skipping options, e.g. for PCLI, GRE, etc 	Mediation Device <ul style="list-style-type: none"> 4Gbps throughput NHIS 2.4.1 support Raw delivery Probe Direct <ul style="list-style-type: none"> VLAN or MPLS tagged Ultra-low latency

Roke are Changing Worlds

Roke is a world-leading UK technology company and a pioneer in science and engineering. For over 60 years we've been improving the world through innovation by combining the physical and digital in new ways. We create technologies and products to solve real world technical challenges and help deliver critical missions for our customers. Our deep knowledge of sensors, communications, cyber and AI means our 600+ engineers are uniquely placed to combine and apply these technologies to solve real world technical challenges and help deliver critical missions for our customers.

As a trusted partner, we welcome any problem, and are confident that our consulting, research, innovation and product development will keep people safe.

For more information on the items discussed in this document you can contact us:

Call: +44 (0)1794 833000 • **Email:** info@roke.co.uk • **Visit:** www.roke.co.uk