Data Sheet

Solving the Challenge of Secure Enterprise Access

Making identity the new perimeter

Enterprises are being transformed by the cloud, mobility, remote access, and connected devices, while under constant attack by increasingly sophisticated bad actors.

But to address this challenge, organizations are still using fragmented and legacy point solutions to secure access to their data and assets. These security solutions for campus, branch, cloud, and remote access were not designed for today's needs, and expose organizations to insider attacks, lateral movement, and privilege escalation attacks in the cloud.

Organizations need to transform their enterprise security with a unified solution — enabling them to enforce consistent policy from edge to edge, while powering connectivity to any application or data, from any device, by any user, anywhere.

The Challenge: Providing secure access when...

- The cloud is your data center
- Any device is a "work" device
- Employees work from anywhere
- Applications are delivered from and to anywhere
- Your network is the Internet
- Confidential data is an asset, distributed across your digital footprint

Achieve access without compromise with Elisity Cognitive Trust

Elisity Cognitive Trust (ECT) is the industry's first Zero Trust networking and Software-Defined Perimeter solution.

Serving every domain — campus, cloud, remote access and more — ECT provides organizations with a comprehensive, cloud-delivered way to secure access across the enterprise.

Purpose built for the demands of the digital enterprise, ECT lets organizations manage end-to-end enterprise policy from one centralized portal.

With ECT, organizations can achieve three critical pillars of enterprise security: full visibility, protection, and Cognitive Cloud.

Full visibility: Enterprises gain full user, device, application, and traffic flow visibility and analytics, across all domains and infrastructure.

Protection: Organizations can manage ubiquitous security and access policy, with decisions based on identity and contextual data such as location, time of day, trust scores, the sensitivity of data or application, and more.

Cognitive Engine: An AI engine continuously monitors activity, traffic flows, and user behaviors to assess risk and automatically make policy recommendations. Policies are never static.

With ECT, organizations can deliver secure, identity-based access to any enterprise asset, for any user, anywhere.

Moreover, organizations can achieve Zero Trust security without heavy lifting. This empowers organizations to:

- Work from home, securely
- Software-define the perimeter, securely
- Transition to multi-cloud, securely
- Operationalize visibility, to any user, device or asset, quickly
- Zero Trust your network, easily

What do we mean by combined Zero Trust and Software-Defined Perimeter?

With Zero Trust and Software-Defined Perimeter, we mean that ECT enables enterprises to achieve two key architectural security goals:

- A state of enterprise security where nothing is trusted by default, access is always monitored, and nothing can connect without a policy (Zero Trust).
- The ability to grant authorization, not based on user IP address or "inside" or "outside" status on the network, but based on identity. This way, access is highly granular, segmented, context-aware, and evolves dynamically (Software-Defined Perimeter). In this way, ECT makes identity the new perimeter.

ECT Use Cases

- **Zero Trust your remote workforce**
  Deploy Cognitive Access Service (CAS), a next-gen VPN alternative
- **Zero Trust your existing VPN**
  Augment your VPN with ECT and fill security gaps
- **Zero Trust your IoT/OT networks and device**s
  Secure access for critical devices, apps, and hardware
- **Unify and secure multi-cloud access**
  Gain Zero Trust access, with fine-grained control over apps and resources

Solution Components

Elisity Cognitive Trust achieves Zero Trust and Software-Defined Perimeter by granting access only to specific resources, not the underlying network. ECT achieves this with four major solution components: Cognitive Cloud, Cognitive Edge, Cognitive Access Service, and Cognitive Connect.

Cognitive Cloud

The core of ECT is a centralized, cloud-delivered platform. The platform contains:

- A policy plane for comprehensive policy management
- A control plane for managing routing context
- An AI layer that continuously monitors risk for all assets — users, devices, applications, and data — across every PIN

Advantages: The Cognitive Cloud pushes access policies "just in time" for users, privileging security over connectivity. This enables access based on identity and continuous risk monitoring, from an access perspective.

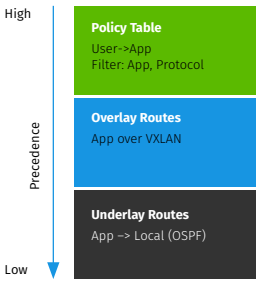
ECT overlays on existing infrastructure and connectors to automatically discover all enterprise assets privileging security over connectivity and continuously monitoring every access decision for risk. Moreover, ECT supports seven asset communication models (e.g., User to Device, Device to App), across all PINs.

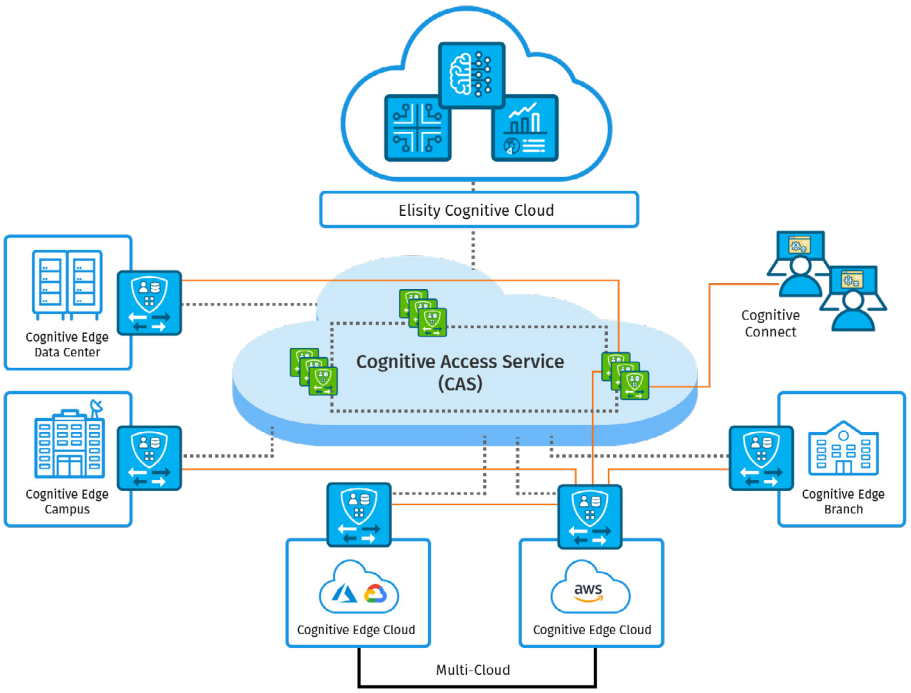
Cognitive Edge

The Cognitive Edge is the data plane deployed at the edge, enabling distributed policy, close to the point of data creation. The Cognitive Edge:

- Implements and enforces access policy pushed from the Cognitive Cloud
- Provides inspection of the traffic stream for excessive risk, relative to the sensitivity of data
- Can enable end-to-end encryption of network communications
- Is deployed at the edge with hardware, software, or as a container

Advantages: The Cognitive Edge enables secure access, by ensuring that assets are only connected with a policy. The Cognitive Edge also removes all enterprise assets from direct visibility, while obviating the need for VLANs, ACLs, VRFs, or Zones.





Solution Components

Cognitive Access Service (CAS)

Elisity Cognitive Access Service (CAS) is a next-generation VPN replacement that combines Zero Trust access and Software-Defined Perimeter. CAS is an Elisity-managed, cloud-delivered remote access service with a global backbone that allows remote users to connect to the nearest region from anywhere in the world, for better performance and quality of service.

In addition, CAS:

- Implements and enforces identity-based policy pushed from the Cognitive Cloud
- Provides policies without decrypt-encrypt cycle
- Can provide network functions such as QoS, path selection, and routing
- Integrates with security capabilities such as DLP, FWaaS, threat prevention, and more
- Securely connects users to applications in Cloud, data center, Public Cloud, or SaaS
- Integrates with SIEMs to provide comprehensive logging and user behavior metrics

Advantage: The cloud-delivered Cognitive Access Service delivers the required services and policy enforcements on demand, independent of location of the entity requesting the service, and the access to the capability.

Cognitive Connect

Elisity Cognitive Connect is a software agent that creates "right-sized," Zero Trust access for any remote user, without the use of a VPN. Cognitive Connect initiates secure connections directly from a remote user's device to an enterprise resource, through the Elisity-managed Cognitive Access Service (CAS). The Cognitive Connect software agent:

- Initiates secure connection to the nearest Elisity CAS
- Integrates with MFA and SSO authentication with leading Identity providers (Azure AD, Okta, Ping) to provide authentication
- Provides end-to-end encryption of remote traffic
- Precise segmentation of application or a cloud resource
- Supports replacing both clientless and client-based VPN
- Works on all popular platforms including Windows, MACOS, Android and iOS

Advantage: Together, Cognitive Connect and Elisity CAS enable enterprises to deliver Zero Trust networking and Software-Defined Perimeter for any remote user, in any location, without the use of a VPN.

Features	Descriptions
Elisity Cloud	» Multi-tenancy with a single pane of glass for management & Role-Based Access Control » Data-in-transit protection (inter/intra domain tunnel/encryption management) » Asset/policy discovery, visualization, monitoring, and configuration (user/devices/applications) » Tenant configuration/operational Fault/Event/Performance management » Admins/Users/System/Policy violation events and Audit Logging » Elastic cloud infrastructure with high availability of services across regions » Clustering and DevOps orchestration » Granular access control » Secure and compliant
Campus and Branch Secure Access Edge	» Cognitive access for distributed campus and branch offices » Cognitive Edge with off-the-shelf high-density switches and routers » Support for power over Ethernet » Up to 40G of throughput » Support for direct campus-cloud/branch-cloud/cloud-cloud secure connectivity » Connectivity between hosts in campus and an external domain » Ease of on-boarding with Zero Touch Provisioning » Wired/Wireless clients support » Data protection and anonymization via overlay routing and encryption » Inline application detection, inspection, and policy
Data Center and Multi-Cloud Secure Access Edge	» Virtual machines/cloud instances for Cognitive Edge » Up to aggregate 5G throughput » Traffic steering » Overlay routing and encryption » Inline application detection, inspection, and policy
Cognitive Access Service (CAS)	**Network Capabilities:** » End to End Latency Optimization » QoS » Path Selection » Geo Restrictions » Routing including BGP with VPN peers » Traffic Shaping » Acceleration **Security Capabilities:** » ZTNA/SDP combined access » Identity-based granular policy » Optional double encryption/decryption avoidance for cloud application flows » UEBA » Threat Prevent/Detect » Cloud Application discovery » Sensitive data discovery/handling » Optional Security Integration with DLP, Malware, Threat feeds, Vulnerability scanning, SIEM, SOAR
Cognitive Connect	» Lightweight client » MAC, Windows Laptop » Supports user auth with OKTA/other vendors, and SSO » End-device Telemetry
Connectors to 3rd Party Services	» AWS Integration (Serverless, AWS services, others) » Active Directory integration » API Integration with others

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To see how Elisity Cognitive Trust can power digital transformation in your enterprise, schedule a demo today or request your complimentary Trust Report.

Visit elisity.com.