

SD-WAN SERVICES

Make your company network fit for the cloud age.



The growing demand for cloud-based applications is shaping the design of future corporate networks. Conventional WAN solutions lack the flexibility and intelligence to dynamically align network communications with increasing Internet and cloud usage. With the age of digital transformation, enterprises must extend their cloud connectivity, protect data streams, increase capacity, and ensure maximum visibility regarding applications and network behaviour. The answer to these challenges is the Software-Defined Wide Area Network (SD-WAN).

Digitalisation under control

Applications are the focus of SD-WAN. Cisco describes the principle as follows: «Securely connect any user, any application, anywhere, with the power of the cloud.»

SD-WAN forms a virtual overlay network based on classic transport networks. Its centre is a cloud-based instance that manages all terminals (physical or virtual) at each site.

This is how SD-WAN brings order, flow and security to data traffic: It adapts to the requirements of the applications, offers a comprehensive set of security services, simplifies WAN management and enables the integration of various communication connections.

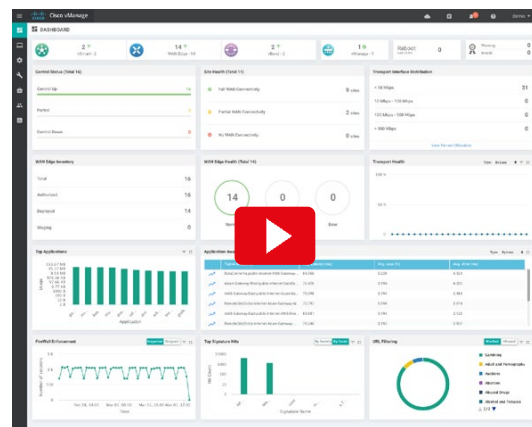
Policies regarding usage monitor data traffic prioritisation and load balancing across all available connections. Application-specific data traffic is automatically routed over the most appropriate transport connection, maximising availability. Direct Internet Access enables a direct connection from branch offices to the Internet and to SaaS and IaaS applications. In addition, the dashboard makes the company network and its behaviour visible and controllable from the centre, so new national and international locations can be integrated quickly and easily. Thanks to SD-WAN, the company network receives maximum agility and flexibility.

SD-WAN as a service

UPC Business has more than 20 years of experience with WAN projects and migrations. Managed SD-WAN comprises of the planning, implementation and infrastructure service on the basis of Cisco technology. For this there are experienced consultants, engineers, project leaders and service managers who are available to the customer. The SD-WAN is completely transparent for the customer from the very beginning.

Advantages of SD-WAN

- **Agility, scalability and performance** – changes to guidelines, software updates and the integration of additional national and international offices are simplified and accelerated without compromising performance.
- **Shorter implementation time** – a centralised deployment mechanism eliminates the need for the local implementation of configuration decisions.
- **Security** – extensive cloud security services and encryption.
- **Seamless integration** – all applications can be integrated within the network independent of the access method.
- **Professional migration** – the UPC Business Team ensures a professional migration and project implementation.
- **Support** – 24/7 Business Helpdesk and on-site support with custom-made SLAs.



Dashboard from Cisco vManage. Video: «The vManage Experience».

Standard features

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| Service features | <p>Application-based routing creates transparency in the network and enables control and improved performance of the data traffic.</p> <p>Encryption: All transmitted data are encrypted in all transport networks used (Internet, MPLS, mobile network). SD-WAN constitutes a secure overlay network.</p> <p>Network segmentation: Multiple VPNs enable the development of logical topologies and the separation of business segments.</p> <p>Application-based topologies: The applications can be assigned their own topologies (Full Mesh, Hub and Spoke, Point-to-Point as well as Multicast and Unicast).</p> <p>Direct Internet access makes it possible for certain applications in a branch office to relay Internet and cloud data traffic directly to the Internet.</p> <p>Cloud access: Cloud On-Ramp enables the integration of IaaS (Microsoft Azure, AWS, etc.) and SaaS (Microsoft Office 365, Salesforce, Dropbox, etc.).</p> <p>Hybrid network services utilise private (MPLS, Ethernet) and public (Internet) networks in order to ensure connectivity at every location across the globe.</p> <p>Embedded application recognition: Deep packet inspection creates application visibility and forms the basis for application firewalls, traffic prioritisation, application-based routing, analysis, etc.</p> <p>Path quality detection selects the path in accordance with quality requirements, thus guaranteeing compliance with the SLAs.</p> | | | | | | |
| Service management | A management console integrates all parts of the SD-WAN (single pane of glass). It provides support during implementation (configuration) and operation (monitoring, alarm and event handling, add/move/change, maintenance, troubleshooting). The management entity is cloud-based (AWS or UPC). | | | | | | |
| Security Features | <p>DNS Security: All DNS enquiries are routed via a DNS proxy (Cisco Umbrella) and checked for integrity.</p> <p>URL filtering allows or denies access to websites.</p> <p>Advanced malware protection is a comprehensive solution for detecting and blocking malware.</p> | | | | | | |
| Transport level | Connectivity is provided by UPC Business or other service providers both nationally and internationally. | | | | | | |
| Number of VPNs | up to 64 | | | | | | |
| Bandwidths | 10 Mbit/s, 20 Mbit/s, 50 Mbit/s, 100 Mbit/s, 500 Mbit/s, 1 Gbit/s, 2,5 Gbit/s, 10 Gbit/s | | | | | | |
| Locations | up to 1,000 | | | | | | |
| Service and support | <table> <tr> <td>Fault acceptance</td><td>7 × 24: 365 days</td></tr> <tr> <td>Support times</td><td>5 × 11: Monday to Friday, 7 am to 6 pm</td></tr> <tr> <td>Service level¹</td><td>Bronze: 99.80% availability per year, max. 8 hours' downtime during the support time</td></tr> </table> | Fault acceptance | 7 × 24: 365 days | Support times | 5 × 11: Monday to Friday, 7 am to 6 pm | Service level¹ | Bronze: 99.80% availability per year, max. 8 hours' downtime during the support time |
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Options

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|--|--|-------------------------------|---|--|---|
| Extended analytics | Continually monitors performance of the entire SD-WAN overlay network. It includes areas for network availability, the applications, etc. | | | | |
| Redundancy/Backup | Path redundancy, connecting device redundancy and connectivity provider redundancy | | | | |
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¹ Cloud availability 99,99%

* Prerequisites: Service must be connected using path redundancy.

The details in this document do not constitute a binding offer. Subject to modification without notice.

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