



\* CASE STUDY



## Avaya Inc.

Customer Support Improved via Convenient Identification and Authorisation of Avaya Technicians





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## AVAYA

### SOLUTION SUMMARY

A global leader in secure and reliable Internet Protocol telephony systems and communications software applications and services, Avaya, Inc. serves more than one million businesses. When the company embarked on the design of a new identification and authorisation mechanism for its sizable technician workforce, critical success factors were to ensure security and integrity, as well as gaining full customer acceptance and comfort with the proposed solution. VeriSign® Managed PKI (MPKI) and VeriSign® Unified Authentication (UA) with VeriSign Multipurpose Next-Generation Tokens® helped Avaya achieve this, and more.

### Industry

- Telecommunications

### Challenges

- The company is developing a new management infrastructure module architected to facilitate convenient identification and authorisation of the 7,000 Avaya technicians accessing customer systems and data.
- It requires a cost-effective solution with sufficient flexibility and scalability to accommodate the dynamic needs of a rapidly growing customer base.
- Avaya needed the implementation to impose nominal overhead on customers, and be manageable for technicians.
- It desired the proposed solution to have sufficiently obvious and compelling benefits to completely overcome any potential issues or concerns that might be raised.

A recognised world leader in secure Internet Protocol (IP) telephony systems, communications applications, and services, Avaya helps its customers leverage new and existing networks to achieve superior results when compared to more traditional approaches. The New Jersey-based company serves over one million enterprise customers, including 90 percent of the Fortune® 500, and has accumulated vast expertise in both enterprise telephony and IP technologies, which allows it to integrate communications and business applications across virtually any network and device.

Capitalising on the myriad of benefits offered from the transition by enterprises to IP telephony, Avaya shipped more lines than any other company, according to Synergy Research. A key differentiator has been achieving the objective of deploying innovative technologies and solutions that enable clients to evolve networks and communications applications at a pace consistent with their own unique business expectations.

Rick Robinson, senior security architect and customer security advocate, elaborated, “As we consistently push our products to meet the demands of dynamically changing customer needs, we also strengthen our own portfolio with world-class service and support offerings. We are constantly advancing our services infrastructure to stay ahead of the demand curve for secure, reliable, and robust service offerings for each of our diverse community of customers as their communications-enabled business processes evolve.”

Customers are tenaciously focused on controlling access to their own networks and systems, as well as ensuring that legitimate partners don’t inadvertently create the potential for malicious activities. It is therefore of paramount importance for Avaya to maintain the highest standards possible whenever interacting with a client’s data, systems, and networks. The company embarked on an initiative to strengthen and streamline the mechanism by which its support personnel accessed each customer’s environment. Robinson explained, “We have a responsibility to ensure that the access provided to our technicians did not, in any way, compromise our customers’ security and integrity policies. We needed to provide our clients with complete confidence in our approach, methods, processes, and procedures.”

He continued, “Furthermore, given the magnitude of our customer base, we needed a method of secure remote access that was fully scalable and sufficiently flexible to meet the volatile needs of our marketplace, while still being able to completely leverage our rich foundation of technologies and systems which we know to be reliable and secure. We are settling on identifying and implementing a credential-based mechanism—exactly tailored to meet our rigorous set of performance criteria—that would provide a single identify for each of our 7,000 technicians and be acceptable to our customers.”

### + Widespread Acceptance is Key—VeriSign Paves the Way

One of the key challenges was to deploy a credential to the Avaya technicians that was secure, could be trusted, and could be easily authenticated to the satisfaction of all customers. Additionally, the solution that was ultimately selected had to be workable for the technicians. Robinson commented, “We needed to avoid the problem of having our technicians carry a different token for each customer that



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### Solution

- VeriSign® Managed Public Key Infrastructure (MPKI) Services
- VeriSign® Unified Authentication (UA) with VeriSign Multipurpose Next-Generation Tokens®

### Results

- Customers will be provided with auditable two-factor authenticated access of each Avaya technician who will be uniquely identified.
- Avaya will significantly reduce administrative overhead, its customers will not be burdened with traditional chores associated with managing identities, and ongoing support is extremely cost-effective.
- Avaya's partnership with VeriSign should prove to provide a powerful benefit to clients basing buying decisions on data integrity and security
- The benefits of this solution are irrefutably obvious to customers—immediately instilling comfort and confidence in the implementation.

they supported. As we considered the number of technicians, customers, systems, and network constraints, the issue of scalability became an important consideration. Customers were looking for something they could control and validate without any capital outlay or administrative overhead. To solve this problem, we knew we wanted a PKI-based [public key infrastructure] solution and we knew that VeriSign was the company to help us meet our goals.”

Robinson elaborated, “It is not just about technology. Given enough time and effort, anybody can implement and deploy a PKI, but can it be trusted? Is it reliable? Is it recognised and accepted? VeriSign is a name that is widely trusted, but we weren’t prepared to bet the successful outcome of this critical project on reputation alone—we exhaustively reviewed numerous potential candidates and after rigorous review cycles, we decisively chose VeriSign. Many vendors make sweeping claims, but VeriSign was the only company that could truly provide the whole package—they validated our faith in being able to deliver and clearly demonstrated leadership on multiple fronts.”

Rather than integrating the entire technician force into each customer’s IT infrastructure with unique credentials, by utilising surrounding policies and procedures to handle on-boarding and off-boarding the company worked with its customers so they would be comfortable with the PKI credentials of Avaya technicians. This PKI approach completely eliminated any ongoing administrative overhead for the customers to support Avaya technician’s accounts while still providing the level of unique identification and authentication necessary to satisfy individual client’s security requirements. As part of this plan, Avaya technicians will be issued USB-based eTokens to store certificates: creating a true two-factor authentication model that is extremely simple to use, auditable, and fully reliable. “Defining the solution really was a collaborative effort between the VeriSign team and Avaya,” said Robinson.

### + Hitting a Home Run with VeriSign

Robinson described the general reaction to the proposed solution, “This is a security home-run. We will be able to provide our customers with strong, two-factor authentication of our technicians—they can each be uniquely identified and validated. Furthermore, our customers will not be burdened with the traditional chore of managing any of the identities. When our clients looked at the benefits of this effort and recognised that there was no ongoing administrative overhead, they could see we had a compelling solution.”

He added, “Once a customer saw that our plan is to comply with the VeriSign policies and practices, and that there would be no reason for them to take responsibility for issuing and managing the tokens themselves, they realised that it would actually save a substantial amount of work. Our partnership with VeriSign gave the solution immediate credibility.”

To achieve the necessary levels of flexibility and functionality required, Avaya is implementing the VeriSign Multi-purpose Next Generation Token® module from the VeriSign® Unified Authentication (UA) suite and the integrated VeriSign® Managed Public Key Infrastructure (MPKI Services).

VeriSign Unified Authentication gives enterprises up to a 40 percent lower total cost of ownership by utilising cost-effective tokens and without the need to add new infrastructure. Flexible integration and deployment options include the choice of using a VeriSign hosted validation utility or an in-premise validation



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Rick Robinson  
Senior Security Architect and  
Customer Security Advocate  
Avaya Inc.

engine. VeriSign UA offers a fully open architecture, as opposed to a more traditional, and limited, proprietary solution.

### + Even More Reasons to Choose VeriSign

Traditionally, provisioning and managing authentication mechanisms like public key infrastructures can be a complex and costly task. VeriSign UA reduces the complexity and cost of strong authentication by providing a single, highly scalable platform for managing all types of two-factor authentication credentials.

Robinson observed, “Deploying VeriSign’s MPKI will allow us to completely control the costs of the solution and give us all of the functionality needed to keep pace with our customer’s evolving requirements. All VeriSign processes and interfaces are clearly defined and documented, making maintenance and management activities very efficient. The MPKI integrates into our internal LDAP systems [Lightweight Directory Access Protocol], and we are even able to keep the state of individual certificates automatically updated because of the MPKI integration with our existing business processes. These capabilities make the solution very simple to administer and very cost-effective.”

### + The Answer is Simple—VeriSign!

When asked for recommendations for companies contemplating a similar type of project, Robinson responded, “Engage VeriSign! They have the validation services, they have the management interfaces, they know how to integrate hardware security modules, and they have a good selection of Smart Cards and Smart Card-based tokens. Many people think they can create their own PKI with OpenSSL, but something of this nature is so much greater than that—this is building an entire supporting infrastructure that is available 24 by 7 and you just can’t do it by yourself.”

“VeriSign’s day-to-day services and support have been excellent! As we have tested the solution, we’ve experienced five 9’s reliability—99.999 percent—from VeriSign’s solutions, giving us the confidence to expand our deployment. The level of support we get has been fabulous too, we monitor all aspects of the infrastructure, but we don’t feel the need to have a dedicated staff,” commented Robinson.

He noted, “The bottom line is that I have been very, very happy from an operational standpoint with all VeriSign’s products and services. Since deployment of the VeriSign solutions, Avaya has experienced major cost savings.”

Robinson also praised VeriSign’s pervasive reputation for integrity and trustworthiness across the globe. He reflected, “The VeriSign solution has positioned us to meet the most difficult of our customers’ security demands for identification and authentication of our technicians. Our partnership has proven to be a major benefit—our clients know VeriSign, and know it is a company they can trust.”

He concluded, “VeriSign’s entire managed services, customer provisioning, ease of use and ease of doing business with have been a complete pleasure for me, and on top of all this, we saved a significant amount of expense by not having to attempt doing everything in-house.”

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