ENTERPRISE COMMUNICATIONS PLATFORM PREMISE VS. CLOUD-BASED IP TELEPHONY

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EXECUTIVE SUMMARY

Where is this info from?

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David Stein, of the independent consulting firm Stein Technology Consulting Group (STCG), delivered the "UC RFP and Review: Enterprise Communications Platform--Premise vs. Cloud-Based IP Telephony" session at the 2014 Enterprise Connect conference in Orlando. The objectives of the session were to enhance understanding of leading Premise and Cloud IP Telephony System /UC offerings through a review and analysis of RFP responses, discuss the highlights and differentiators of vendor offerings including core IP Telephony systems, Unified Communications, Fixed Mobile Convergence and SIP, and provide guidance for Total Cost of Ownership (TCO) as well as recurring costs for maintenance, software support and release upgrades.

SPOILER ALERT! There were significant differences in the offerings from the vendors in terms of architecture, functionality and total cost of ownership. Based on the RFP results, NEC provides an ideal architecture for business continuity, scalability, virtualization, and especially security. Its Unified Communications offering scores extremely well in the functional and technical requirements. NEC's performance, combined with receiving the best Total Cost of Ownership rating, make it an excellent option for Communications Technology Infrastructure, and should be considered a candidate when looking for potential strategic partners in the space.

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INTRODUCTION
What (and who) are we comparing?

INTRODUCTION

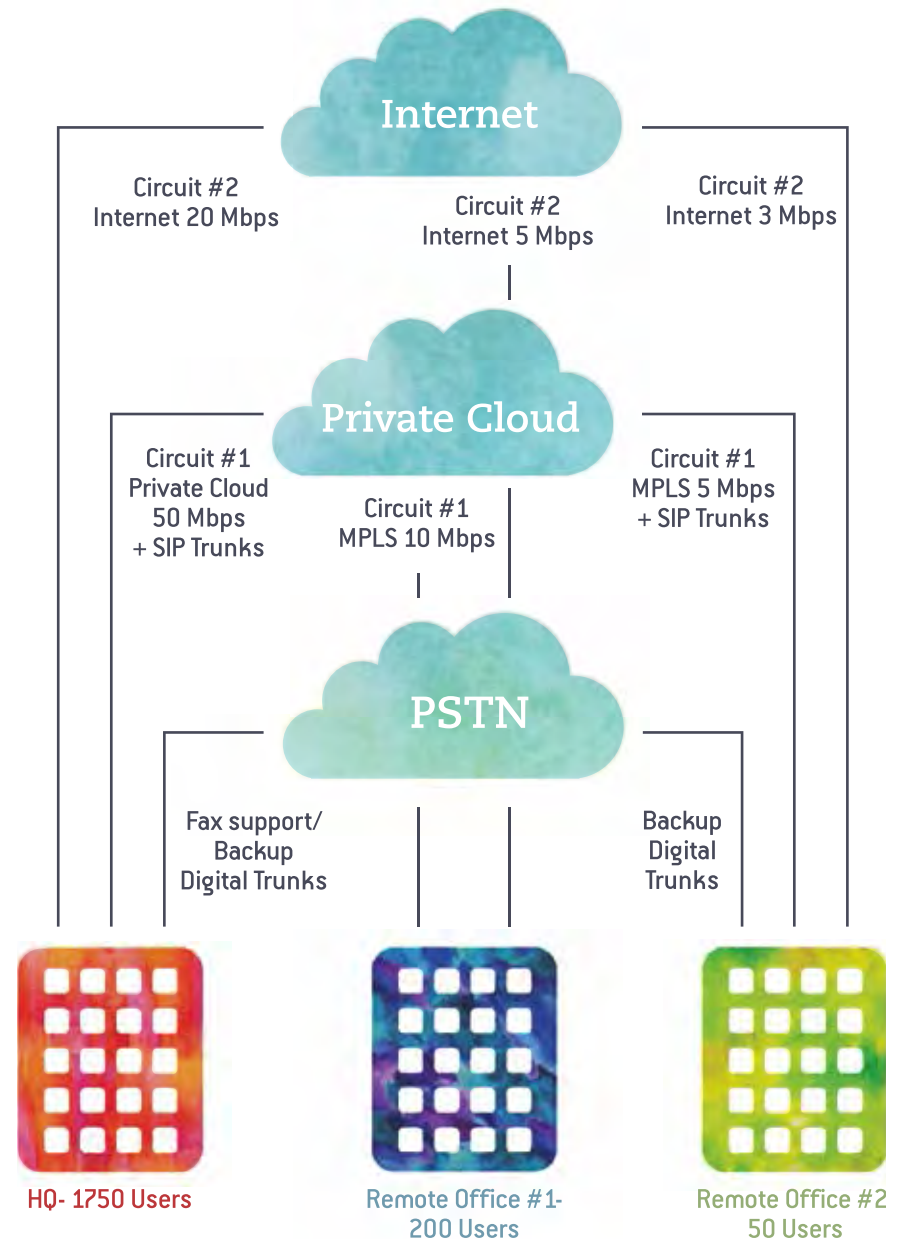## *What (and who) are we comparing?*

The UC RFP and Review: Enterprise Communications Platform--Premise vs. Cloud-Based IP Telephony session is the latest in the evolution of the "mock" RFP at Enterprise Connect. This session is a long running tradition and the ideal way to provide potential customers an objective way to learn about the top vendors in the industry.

Seven vendors proposed ten solutions consisting of premise-based solutions (that could also be deployed as private cloud implementations) as well as vendor-provided-cloud-based offerings. The proposing vendors come from a variety of backgrounds ranging from over 100 years of telephony experience to very recent entrants into the market. They all responded to the "mock" RFP.
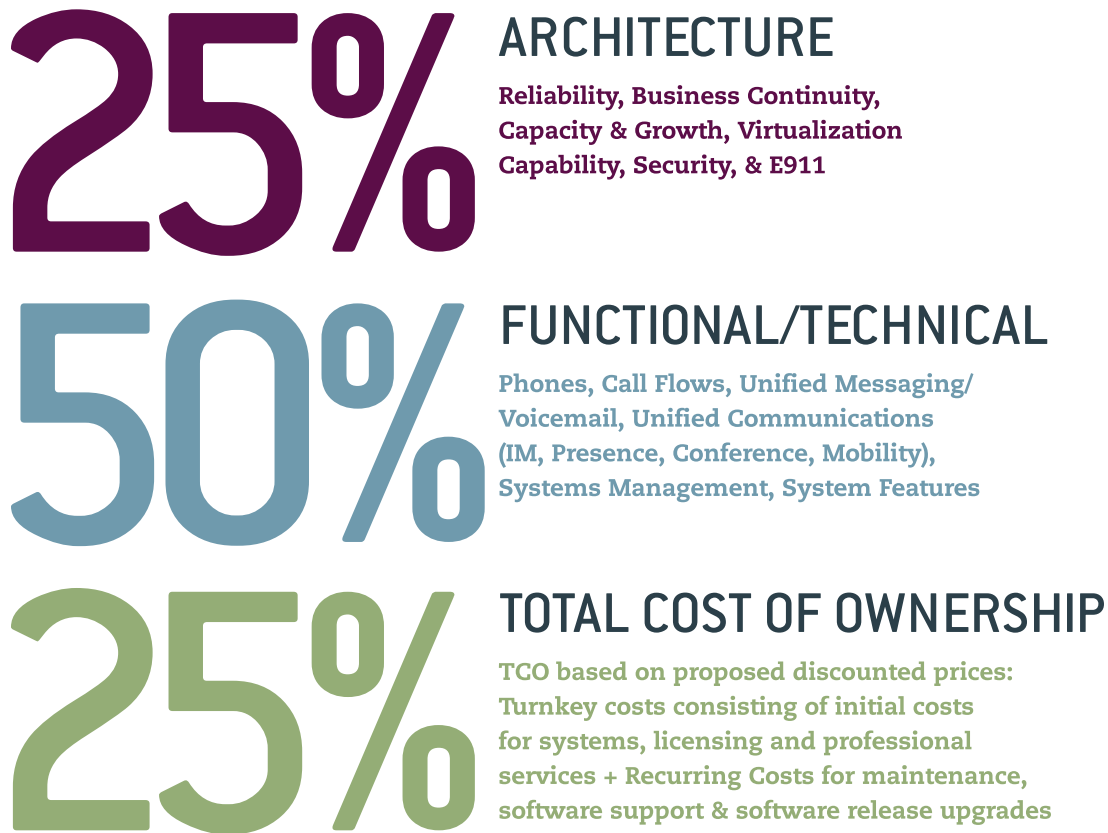
The vendors that responded to the RFP included:

+ Alcatel-Lucent
+ Avaya
+ Cisco
+ NEC
+ ShoreTel
+ Thinking Phones
+ Unify

PROMPT | Although the RFP was modeled on a fictional "Enterprise Connect" organization that included a main headquarters operation as well as two remote offices of different sizes; much of the content was derived from real customer RFP procurement documents utilized previously by STCG. The "Enterprise Connect" 2000 user organization distributed according to the diagram shown.

Internet

Circuit #2
Internet 20 Mbps

Circuit #2
Internet 5 Mbps

Circuit #2
Internet 3 Mbps

Private Cloud

Circuit #1
Private Cloud
50 Mbps
+ SIP Trunks

Circuit #1
MPLS 10 Mbps

Circuit #1
MPLS 5 Mbps
+ SIP Trunks

PSTN

Fax support/
Backup
Digital Trunks

Backup
Digital
Trunks

HQ- 1750 Users

Remote Office #1-
200 Users

Remote Office #2
50 Users

Each of the vendors' responses was reviewed for compliance to the RFP evaluation criteria and was scored in a similar fashion to real corporate procurements. The main categories of evaluation criteria were weighted in importance and included elements of technical architecture, user and system functionality and Total Cost of Ownership. These categories included the following elements:

25% ARCHITECTURE

Reliability, Business Continuity, Capacity & Growth, Virtualization Capability, Security, & E911

50% FUNCTIONAL/TECHNICAL

Phones, Call Flows, Unified Messaging/ Voicemail, Unified Communications (IM, Presence, Conference, Mobility), Systems Management, System Features

25% TOTAL COST OF OWNERSHIP

TCO based on proposed discounted prices: Turnkey costs consisting of initial costs for systems, licensing and professional services + Recurring Costs for maintenance, software support & software release upgrades

NOTE | Each vendor was provided an overall score based on the criteria articulated above. Vendor scores ranged from 70 to 96, with NEC achieving the highest score of all responses to this year's RFP. As stated during the Enterprise Connect session, the RFP requirements and evaluation criteria/weighting used may differ from those of your particular organization.

The scores of the proposed solutions had two significant bands, one each for the premise and cloud based solutions. Within the premise band, the scores ranged from about 85 to 96. In the cloud band, the scores ranged from about 61 to 71.

TCO was the biggest contributor to the scoring differences between premise and cloud solutions.

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RFP REQUIREMENTS

What are the details?

RFP REQUIREMENTS

What are the details?

The RFP for the 2014 Enterprise Connect Conference was based on a 'real-world' RFP modeled to represent the requirements of a 'typical' 2000 user organization. Details for the 2014 session:

- Vendors could propose Premise and/or Cloud solutions

- The site configurations were specified to emphasize Business Continuity and Remote workers

- Key elements of UC (e.g. Presence, IM, Conferencing), Unified Messaging and Mobility were important elements that were required.

- SIP was specified as the predominate trunking technology, with vendors including SBC functionality in their proposal.

- Service requirements for turn-key installation and training were identified in the RFP and were a key element in calculating the Total Cost of Ownership (TCO).

- Pricing comparisons were based on 5-year TCO including Initial one-time costs as well as recurring annual costs for core hardware maintenance, software support and software upgrades (license protection).

- Vendor "scores" were calculated based on a weighted average of functionality, architecture, price and compliance to the RFP terms and conditions.

In addition to these elements, other key factors for the 2014 RFP included:

- Single system image for software feature operations, systems management admin

- Emphasis on redundant/resilient architecture for both premise and cloud proposals
  + Geo-redundant call control at headquarters and RO#1
  + Duplicated, load sharing or N+1 design elements
  + Business Continuity

- Local survivability at remote location if centralized call control access not available

- Support of E911

- Telephone models: Basic (Public); Standard, Advanced, Soft phone, conference and Operator Console

- Unified Messaging (Exchange 2007 Integration)

- Systems Management: full function, including VoIP/UC monitoring and measurements

- SIP trunks

- Functional Call Flow Scenarios

- Turnkey Installation

- Software Subscription

- Maintenance on core equipment (8x5x4)

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## OBSERVATIONS
Where do the differences lie?

OBSERVATIONS

Where do the differences lie?

The RFP responses confirmed many opinions that I held previous to the review, and included some surprises in unexpected areas. In terms of meeting the basic UC requirements, most vendors performed about the same. The areas where organizations need to pay special attention are architecture, security and total cost of ownership.

First and foremost, significant differences still exist in the proposed vendor solutions in terms of Architecture, Security, E911 support, Mobility solutions, other UC elements, Call Flow handling and feature support, Systems Management, costs and endpoints. So for those who believe that voice is a commodity, I suggest that this is only true for the simplest of user configurations and applications.

Although the RFP listed specific Professional Services requirements, there was a wide variance in the proposed pricing that had to be normalized for the conference presentation. Regardless of whether services are being offered directly from a manufacturer or through a partner/integrator organization, it is important to make sure that the requirements, roles, and responsibilities of/within your organization are well understood by all parties. This is usually a key differentiator in the more successful RFP proposals that I evaluate at my consulting practice.

NOTE | Improvements in Mobility and Virtualization are the two areas that saw the most changes from last year's session.
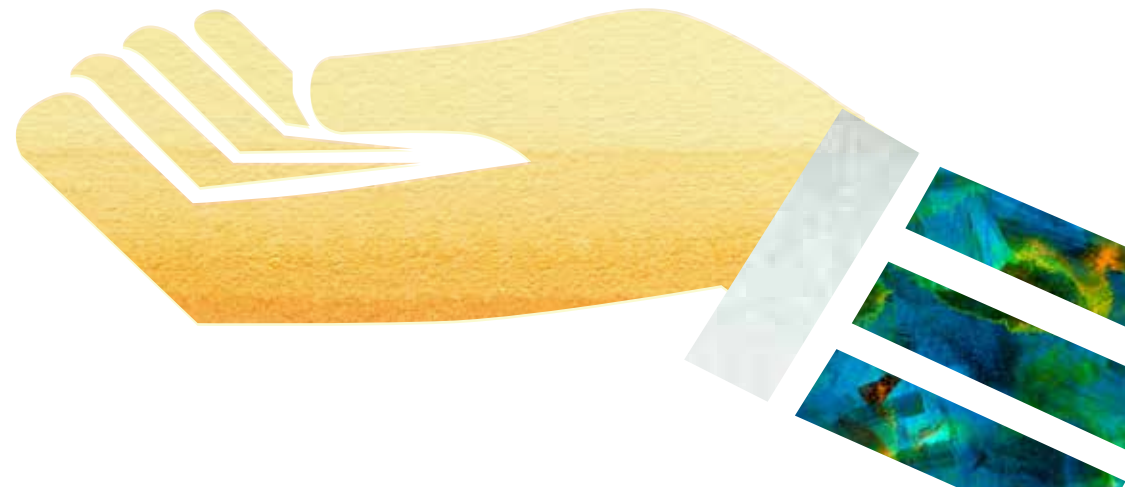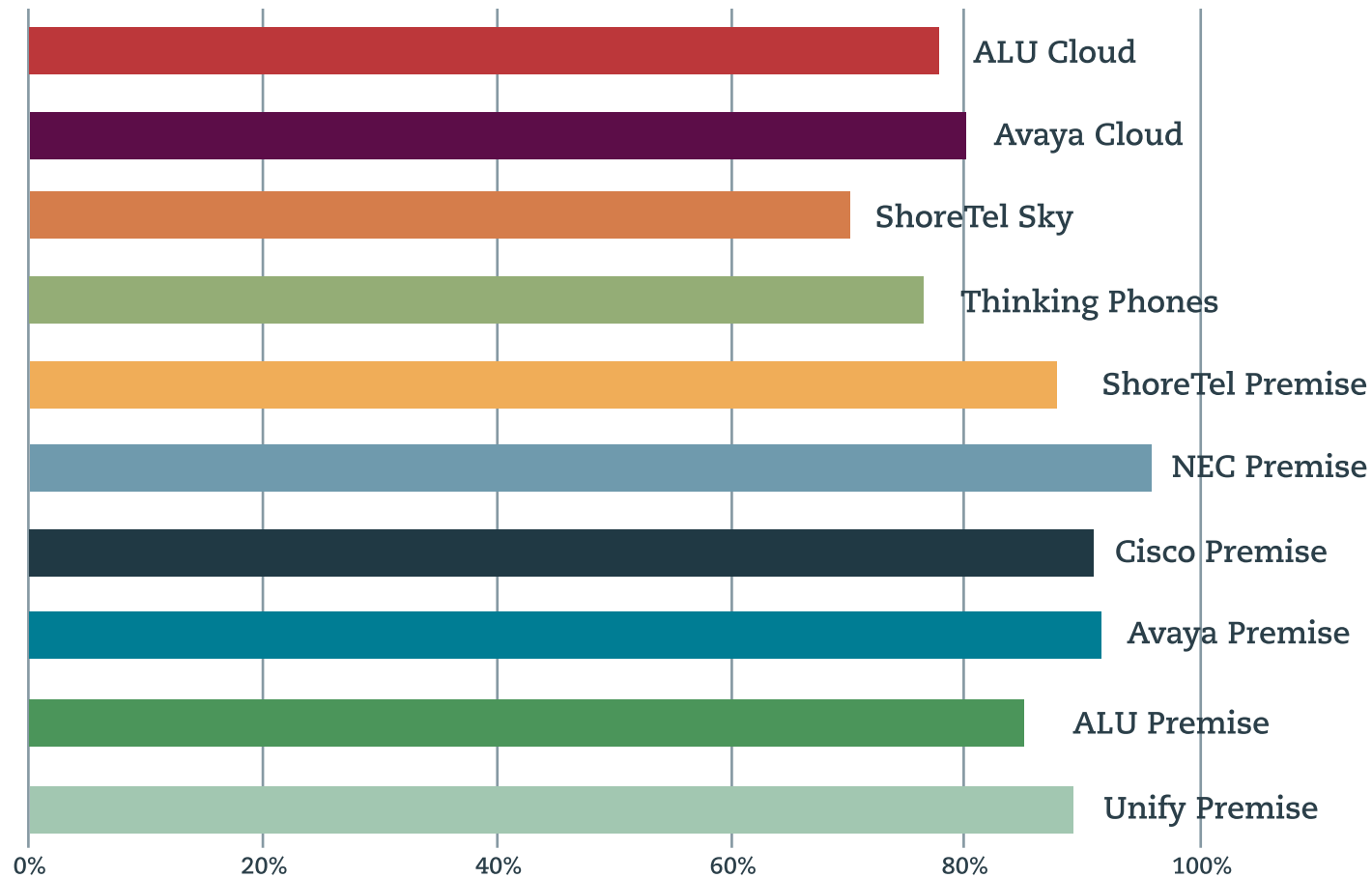
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OVERALL RANKINGS & PRICING COMPARISONS

How do they stack up?

OVERALL RANKINGS & PRICING COMPARISONS

How do they stack up?

As stated in the Executive Summary, the RFP evaluation resulted in the vendors' proposed solutions receiving scores from 70-96.
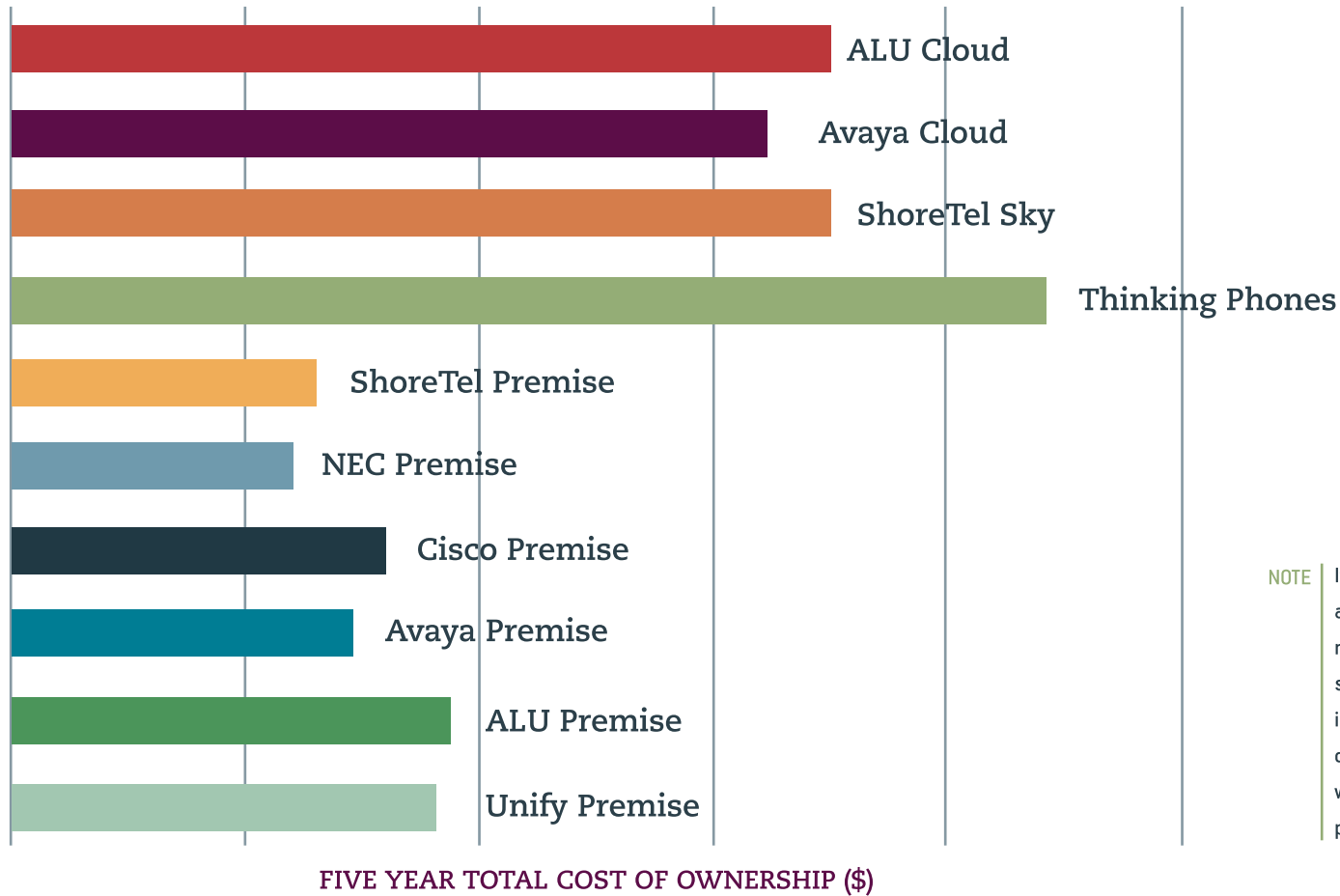
The following bar graph illustrates the overall scoring for the proposed solutions:

OVERALL RANKINGS & PRICING COMPARISONS (cont.)

Who has the lowest Total Cost of Ownership?

The overall pricing comparisons were based on a simple five-year Total Cost of Ownership model. The following bar graph illustrates the TCO for all vendor solutions, including discounted price for initial and recurring costs:

ALU Cloud

Avaya Cloud

ShoreTel Sky

Thinking Phones

ShoreTel Premise

NEC Premise

Cisco Premise

Avaya Premise

ALU Premise

Unify Premise

FIVE YEAR TOTAL COST OF OWNERSHIP ($)

NOTE | It should be noted that actual discounts for any specific project will vary based on a number of factors including incumbency, size of the opportunity, geography, system integration partner, etc. We found the discount offered for the RFP session to be within the range of actual discounts for projects that we've participated in.

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CONCLUSION
Who came out on top?
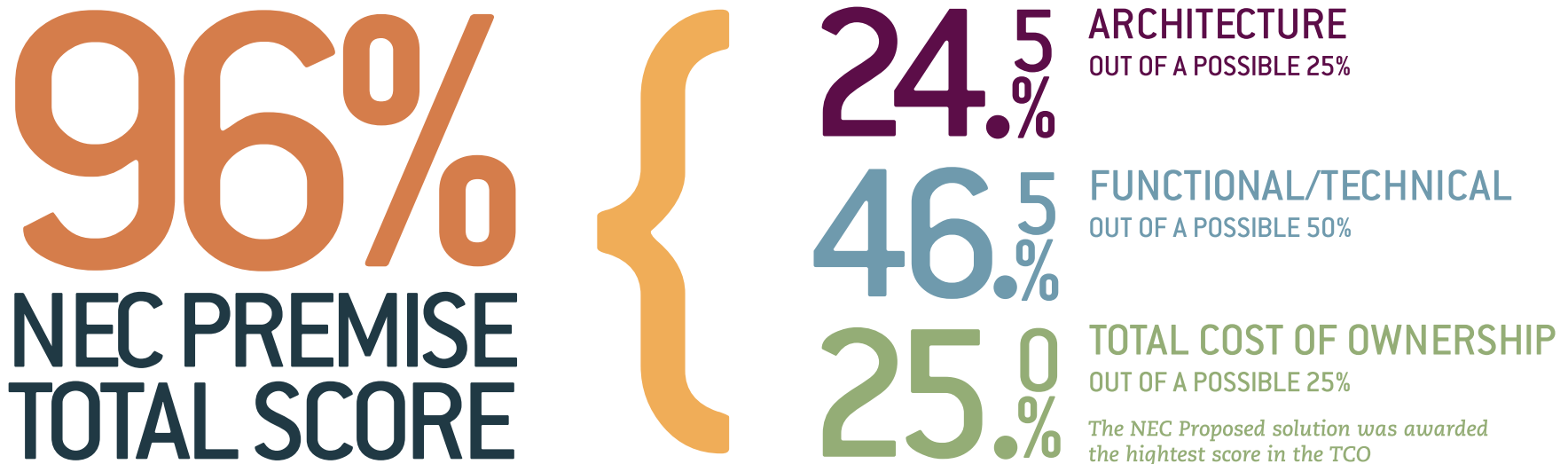
CONCLUSION

Who came out on top?

Based on our analysis, there are significant differences in the offerings from major UC vendors in terms of their solutions' architecture, functionality and total cost of ownership.

Based on the RFP results, NEC differentiated itself from the competing proposals in many of these areas by exceeding the requirements at an attractive price point. Specifically the soft-switch architecture, virtualization support, security architecture and certifications, overall call flow and feature support and endpoints stood out.

This year's session was positioned as Premise vs. Cloud and NEC's response is listed as on-premise. However, it's interesting to note that its software based solution resides on a virtualized server and could easily exist as part of an organization's private cloud. Or alternatively, this configuration could be hosted off-premise in a commercial data center.

For organizations specifically looking to eliminate all capital expense related to communications, NEC's solution is offered in any architectural fashion as an all-inclusive service. NEC's programs deliver UC solutions for a low monthly payment, meeting operational expense requirements. This level of flexibility is another factor that set it apart.

NOTE | NEC provides an excellent value for Communications Technology Infrastructure, and should be considered a candidate when looking for potential strategic partners in this space.

96%
NEC PREMISE TOTAL SCORE

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24.5%
ARCHITECTURE
OUT OF A POSSIBLE 25%

46.5%
FUNCTIONAL/TECHNICAL
OUT OF A POSSIBLE 50%

25.0%
TOTAL COST OF OWNERSHIP
OUT OF A POSSIBLE 25%

The NEC Proposed solution was awarded the hightest score in the TCO

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> As a final note from the UC RFP session, Stein Technology Consulting Group always wants to encourage IT organizations to work closely with the business units they service to better understand their unique requirements and to articulate these when writing RFP or other formal procurement vehicle. This ensures that the responses to your RFP are complete and meet the actual needs of your business.
>
> - David Stein
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About the Author

Mr. Stein, a principal with Stein Consulting Group, has more than 30 years of consulting, information systems and telecommunications experience, with a primary emphasis on IP communications and technology infrastructure projects. His expertise includes the entire technology lifecycle including needs assessment, process evaluation, operations impact, systems design, procurement and implementation project management for cabling, facilities, LAN, WAN, IP Telephony/Unified Communications, network management, data security systems, data center, telecommunications and construction projects.

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