



PETROHAWK ENERGY CORPORATION

Implementing a Cisco Systems IP Telephony Solution with Accudata Systems

Petrohawk Energy Corporation is an independent energy company engaged in the acquisition, production, exploration and development of oil and gas. It owns and operates drilling sites primarily in Texas, Louisiana, Oklahoma, Arkansas and New Mexico. In less than two years, the company's reserve base has grown by twelve times as Petrohawk added to its inventory of oil and gas properties in a robust energy market. Petrohawk is a publicly owned company (Nasdaq: HAWK) experiencing solid business growth.

However, in the last two years, Petrohawk's growth has outpaced its technology and systems. In particular, the company phone system was being taxed to its limits by both the increase in demands placed upon it as well as the increased number of remote offices added to the company. The demands outpaced the network's ability to keep up.

Petrohawk contacted Accudata Systems, Inc. (ASI) in January 2005 for consultation on implementing a new IP Telephony phone system. The company wanted to accomplish a number of goals, including expanding services to its seven remote offices and providing a better overall end user experience by implementing several new technologies available with solutions from Cisco Systems. Accudata Systems developed a three-phased plan for Petrohawk that included design and planning, installation, and user training for a new IPT phone system using a Cisco solution.

Design & Planning

Accudata Systems first conducted a planning meeting with Petrohawk staff to discuss their needs – a dial plan, extensions, and features needed on the new phone system. A great degree of interaction between Petrohawk and ASI would be necessary to ensure a successful IPT deployment. During the meeting, Accudata Systems engineers and Petrohawk staff developed a plan for local infrastructure design, created a dial plan and call routing template, and formulated the list of users and extensions.

The IP Telephony infrastructure, including the MCS system, Cisco Call Manager and IP phones were deployed at the Houston office location. The voice gateway was configured ahead of time to be verified when it was plugged into the PSTN circuit. Existing ISDN PRI, T1, or analog circuits with assigned DID numbers would be tested if they were provided by the PSTN provider prior to the cutover. If a new PSTN connection was provided, IP phones could be deployed in all offices before the cutover date.

Installation

Accudata Systems implemented a Cisco IPT phone solution at Petrohawk, including deploying approximately 40 IP phones, a Cisco MCS System running Call Manager 4.0, and a Cisco Unity Unified Voicemail system. Accudata Systems also configured two new 3560s for the switching infrastructure and a 2610XM VoIP voice gateway.

❖ Cisco Catalyst 3560 LAN Switches

Accudata Systems configured the Cisco Catalyst switches for inline power and for proper trunking operation to the phones. We also tested the switches to determine if VLAN trunking and QoS on the switches performed as designed.



❖ ***Cisco Call Manager Installation***

Accudata Systems installed the primary MCS system and set up the Cisco Call Manager server with the latest service packs and in proper redundancy modes. They installed the secondary MCS system, set up Cisco Call Manager server, and verified that database replication was taking place properly. They also tested connectivity via registration of phones and initial call processing functions, and set up phones using the Cisco Bulk Administration Tool and phone template information provided from Petrohawk staff.

Accudata Systems engineers conducted appropriate testing to verify that both Call Manager systems were replicating data properly and would properly failover to one another.

Voicemail Installation

Accudata Systems installed Cisco Unified Voicemail on a new MCS server and ensured phones that had registered to Call Manager could send and retrieve voicemails. They also verified that calls forwarded to voicemail could be stored and retrieved, and that all Message Waiting Indicators on IP phones functioned properly.

RightFax Integration

Accudata Systems integrated the Captaris RightFax server into the Call Manager gateways for full fax integration. This allowed Petrohawk to pull fax DID numbers from a single T1 line that also provided DID services for PSTN based voice calls.

Training

Finally, Accudata Systems provided a CBT Basic User Training program to familiarize select Petrohawk users with phone and voicemail use. In addition, they cross-trained key administrative personnel during the installation process on the day-to-day administrative functions for the new IPT system.

Accudata Systems provided basic training needs for all users on how the new phone system and voicemail system worked using a Cisco provided CBT software program. Accudata Systems helped acquaint Petrohawk administrators with the processes to add users, change device types, add new gateway functions, and perform simple troubleshooting on the Cisco Call Manager system.

In the end, Petrohawk experienced a very successful IPT deployment throughout its headquarters and remote sites.