

# Cisco Field Expert Collaboration for Oil and Gas



## Overview

In today's oil and gas industry, drilling and extraction increasingly take place at remote, often hazardous locations. With fewer workers on each site, many companies rely on remote expertise to keep these assets operational. Yet comprehensive collaboration is still required to make quick decisions and resolve critical problems.

The Cisco® Field Expert Collaboration solution gives crews immediate, face-to-face access to industry experts using high-quality, on-demand video and communications tools. In integrated mobile conferencing environments, this solution supports personnel with a combination of voice communication and shared contextual video, documents, and process data. Based on powerful Cisco networking, the solution connects field workers with experts in remote operations centers throughout the world, helping them work together to solve problems, reduce downtime, and meet production quotas.

## Oil and Gas Industry Challenges

Today's operators face a number of critical tasks. In perilous locations involving dangerous processes, operators are challenged to keep their workers safe. This must be achieved while finding new ways to optimize costs. Materials and labor are expensive, and it is difficult to make high-investment projects economically viable. Equipment and assets must be kept available and in excellent condition to reduce or avoid downtime. Adding to these concerns, trained industry experts are in increasingly short supply to help deal with planned-and unplanned-situations. The average age of skilled workers is 54 years, and within the next decade, almost 50 percent of these veterans will retire.

Operators are challenged by how to best utilize their remaining experts when there are not enough skilled workers to take their place.

## Optimizing the Aging Workforce

With a growing expertise deficit, companies need to allocate available expert resources over more projects and geographies. With contributions from Cisco developer partners, the Cisco Field Expert Collaboration solution brings experts to the rig through real-time video interaction, allowing them to view the problem, examine equipment, and talk face-to-face with workers using ruggedized mobile video collaboration devices, as well as ruggedized handsets, tablets, laptops, or smartphones. They can also launch a video conference or Cisco TelePresence™ session to meet with global experts. This reduces the number of personnel in the field to lower health, safety, security, and environment (HSSE) risks, and it keeps experts productive longer.

## Reducing Operations Costs

As the number of experts shrinks, companies need to make the most of each valuable resource. Yet it can be both expensive and time-consuming to get workers out to remote drilling sites. The Cisco Field Expert Collaboration solution allows you to create a centralized pool of specialists who are virtually available at any time. Instead of travelling the world, they are established at headquarters or branch offices to consult, guide, and advise. This reduces the cost of transportation, labor, and expert downtime, and moderates personal risk to these important personnel. To comply with regulatory and internal risk management requirements, all interactions can be captured on a digital voice recording.



## Assuring Network Security

Also crucial is the safety of the communications network. Cyber attacks are on the rise against oil and gas infrastructures. Cisco helps to mitigate this risk with a network that provides a very high level of security, including a full suite of industry-leading firewall services. It also offers next-generation encryption, interference and rogue access point detection tools, intrusion detection systems, network management systems, client security, and other critical security and control measures. Networked with video management and camera technologies, Cisco additionally supports physical security systems to help guard the site from intrusion or unauthorized access.

## Efficient Plant Processes

The ultimate goal of any industry is to operate low-margin processes more smoothly and efficiently. With easy access to field data and to experts around the world, a diverse team with a high quality of data is able to make better decisions more quickly. Cisco Field Expert Collaboration also promotes faster response to emergencies and alerts.

## Solution Benefits

- Remote diagnostics and field collaboration
- Centralized problem solving, anywhere, any time
- Access to the expert on virtually any device, at any location
- Access to content-rich information from many sources, including a centralized pool of experts with different skills
- Expanded collaboration between experts and the field

## Why Cisco

Cisco has more than 25 years of experience in industrial networking, extending the reach of your operation while protecting your investment in remote or hazardous sites. To learn more, go to our website at <http://www.cisco.com/go/energy>.

