

# Prepare mining operations for the future with Cisco and Rockwell Automation



## Market pressures put productivity and profitability at risk

- Asset visibility and utilization
- Worker safety
- Cyber threats and attacks
- Geographic isolation
- Compliance and license to operate
- Environment impact

Mining companies are embracing modernization of their industrial operations as the way to address these challenges.

## Pain points that Cisco and Rockwell Automation are solving for

- Reliable wireless reception including open pit and underground areas
- Infrastructure needed for geographic isolation and remote operating centers
- Tools to simplify the ease of transition to a modern solution
- Personnel need to be skilled in using new technology

A modern solution is required to provide end-to-end visibility, security, and control across OT and IT assets.

## Together, Cisco and Rockwell Automation can help with a holistic blueprint for your digital transformation

- Deploy a converged network architecture that makes networks data-ready
- Collect and analyze network data to get ahead of the maintenance curve, keep systems secure, and accelerate responsiveness
- Increase profitability by lowering operating costs (maintenance, response time)

## Why Cisco and Rockwell Automation?

Leading digital transformation for The Connected Enterprise with industrial ready, world-class control, power and information systems and IT networking and security technologies



### Trusted domain experts with a strategic alliance

- 13+ years of experience together
- Jointly developed and validated IIoT and IT-OT solutions



### Committed to driving industry success

- Workforce training and enablement
- Leader in technology and industry standards



### Dedicated to developing ground-breaking solutions

- Versatile and future-ready solutions
- Faster time to value with remote connectivity



**270%**

expected growth in digital technology investments for mining operations<sup>1</sup>



**63%**

of surveyed mining executives struggle to integrate data across multiple systems<sup>2</sup>

Prepare mining operations for the future with the Converged Plantwide Ethernet Solution (CPwE), network architectures from Cisco and Rockwell Automation that connects production systems to business systems.

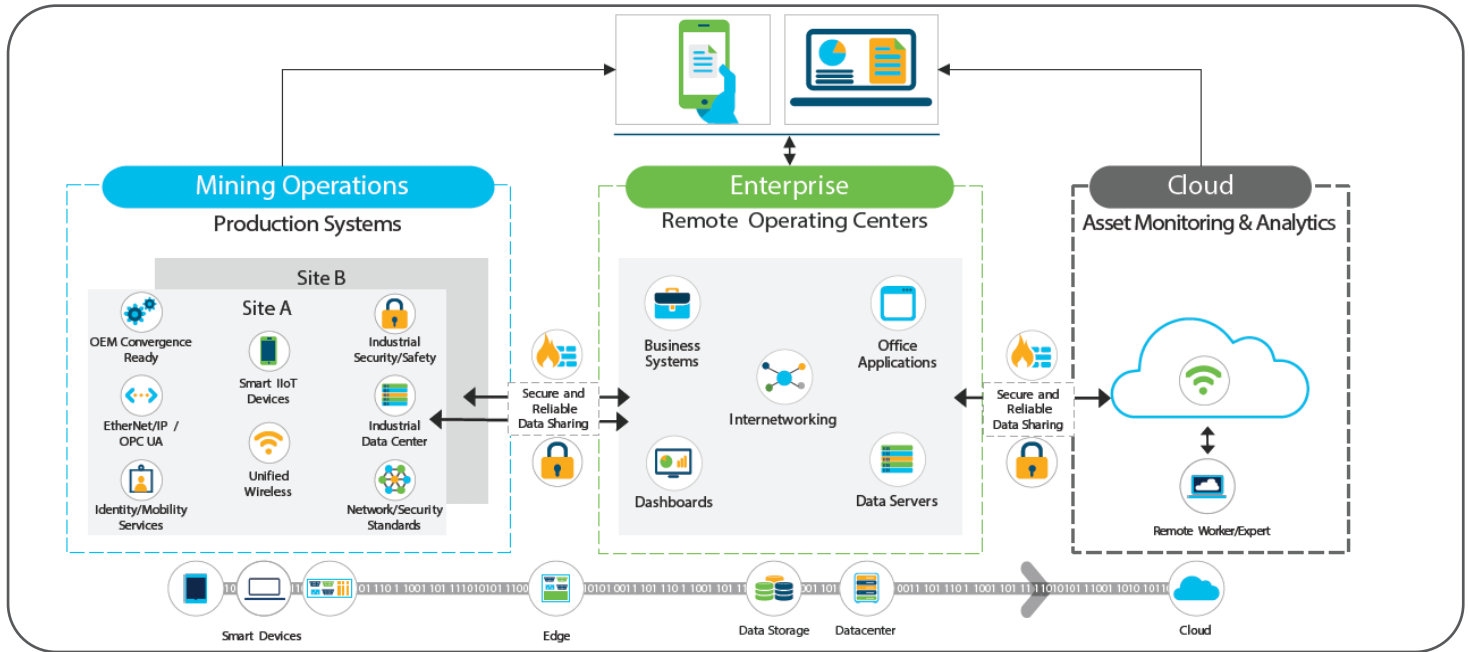


Figure 1: CPwE Architecture Diagram

## Benefits



### Flexibility and efficiency

With changing market dynamics, a more agile mining process allows for increased production profitability.



### Visibility into operations

Production and assets visibility drives improved business decisions while increasing productivity and product yield.



### Environment and Safety

Compliance with environmental and safety guidelines enables sustainability and employee retention.

## Key Features

### Remote Connectivity

- Incorporate a breadth of hardware and software offerings for a holistic, end-to-end network and security architecture
- Connect industrial operations to business systems using EtherNet/IP™, Stratix® industrial switch, and Catalyst switch lines to enable extensive interconnectivity and interoperability

### Scalability and Manageability

- Flexibility to seamlessly add new skids or expand your operations as your business grows
- Future-ready architecture to support IIoT innovations (such as mobility, collaboration, analytics, and cloud connectivity)
- Simplicity on where to start

### Security and Safety

- Automate and enforce security policy including access control through security group segmentation with Cisco TrustSec
- Integrate and secure data into a single information management and decision support system with real-time visibility
- Align to cybersecurity and worker safety standards such as IEC 62443, NIST 800-82 and US Homeland Security best practices

## Next Steps

To learn more about the Cisco and Rockwell Automation alliance and joint validated designs, like CPwE, visit: [www.cisco.com/go/cpwe](http://www.cisco.com/go/cpwe)

- [www.cisco.com/go/rockwellautomation](http://www.cisco.com/go/rockwellautomation)
- [rok.auto/cisco](http://rok.auto/cisco)

Design and Implementation Guides can be found at the following URLs:

- [Rockwell Automation Industrial Networking](#)
- [Cisco Design Zone](#)

For purchase information, reach out to your local [sales office](#) or [distributor](#)