

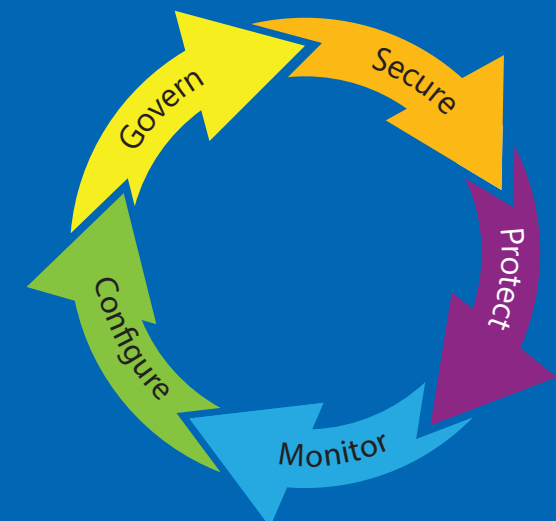
Azure security + operations management

Manage and protect your Azure and on-premises resources efficiently

Built-In. Intelligent. Hybrid.

Security and operations management are a joint responsibility between you and Microsoft. But we make it easier:

- Azure has unique **built-in** security and operations management capabilities that span the full lifecycle and support both Linux and Windows
- Azure makes **intelligent** recommendations based on machine learning and threat information sourced from the Microsoft intelligent security graph
- Azure provides first class support for **hybrid** environments—in the cloud and on-premises—from one place



The security + operations management lifecycle

Built-in

Full lifecycle of security and operations management services—secure, protect, monitor, configure, govern—built directly into Azure

- Easy to set up and get started while creating a virtual machine in the Azure portal
- Out-of-the-box dashboards, queries, controls, and policies based on the most common customer needs
- Support for Linux and Windows

Intelligent

Microsoft cloud intelligence and machine learning help prevent downtime to keep you productive

- Get deep visibility into your applications and infrastructure—from a virtual machine to a single line of code—to support DevOps development
- Smart, prioritized recommendations based on machine learning
- Data visualizations in the Azure portal with alerting capabilities so you are notified of issues quickly

Hybrid

Manage Azure and on-premises resources together

- Learn one service and apply the same techniques to both Azure and your datacenter
- Modernize your approach to on-premises management—view and evaluate all resources together and manage with Azure services and tools
- Support for Hyper-V and VMware

AZURE SECURITY CENTER

Security Management



- Manage security across all your hybrid cloud workloads – on-premises, Azure, and other cloud platforms – in one console. A built-in dashboard provides instant insights into security issues that require attention
- Ensure compliance with company or regulatory security requirements by centrally managing security policies across all your hybrid cloud workloads
- Collect, search, and analyze security data from a variety of sources, including connected partner solutions like network firewalls and other Microsoft services

Threat Protection



- Enable actionable, adaptive protections that identify and mitigate risk to reduce exposure to attacks
- Use built-in behavioral analytics and machine learning to identify attacks and zero-day exploits. Monitor networks, machines, and cloud services for known attack patterns and post-breach activity
- Quickly assess the scope and impact of an attack with a visual, interactive experience. Use predefined or ad hoc queries for deeper exploration of security data

BACKUP

Simple and reliable cloud-integrated backup as a service



- Back up an Azure virtual machine in only three clicks
- Reduce your costs involved in storing and retrieving your backups
- Protect your backups from ransomware through multifactor authentication, alerts, and retention
- Back up on-premises files, folders, or virtual machines running on VMware or Hyper-V to Azure

SITE RECOVERY

Ensure application availability with Azure Site Recovery



- Set up disaster recovery between Azure regions in 3 steps
- Sequence the order of complex, multi-tier applications to fail over to Azure, and fail back applications as needed
- Test your disaster recovery plan without impacting production workloads or end users

APPLICATION MONITORING

Application Insights



- Monitor Azure websites, including those hosted in containers, plus websites on-premises and with other cloud providers
- Detect and diagnose exceptions and application performance issues
- Visualize application usage (histograms, etc.) to help direct future investments—see who is using what, and allocate engineering resources as appropriate

AZURE RESOURCE MANAGER

Simplify how you manage your app resources



- Define the infrastructure and dependencies for your app in a single declarative template
- Use the template for all environments such as test, staging, or production
- Deploy resources together and easily repeat deployment tasks
- See which resources are linked by a dependency

CONFIGURATION

Configure, monitor, track changes, and collect inventory of your cloud and on-premises resources



- Apply and monitor desired state configuration using PowerShell
- Collect inventory and track changes across software, services, daemons, files and registry

CLOUD SHELL

Your Microsoft-managed admin machine in Azure, for Azure



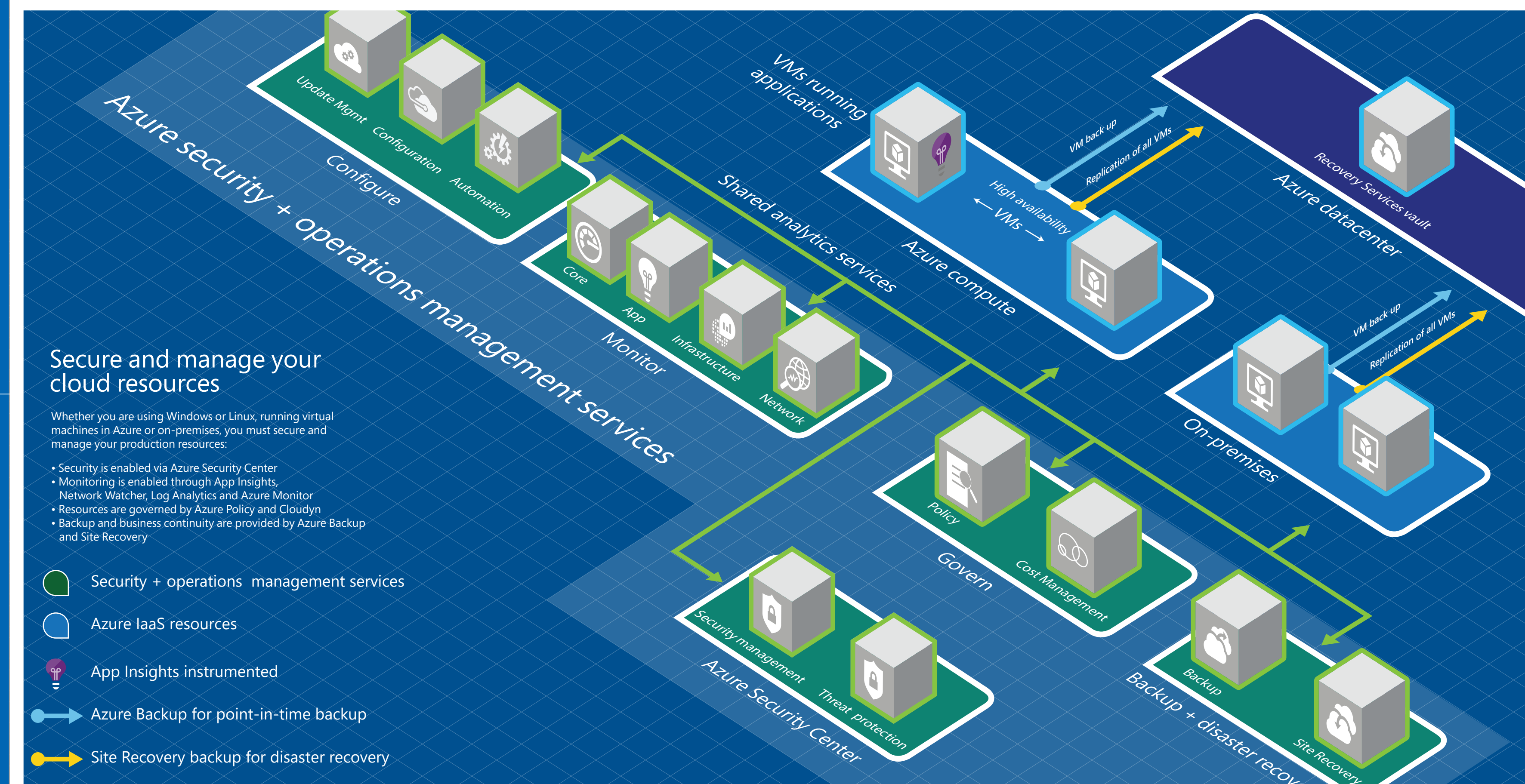
- Get authenticated shell access to Azure from virtually anywhere
- Use common tools and programming languages in a shell that's updated and maintained by Microsoft
- Persist your files across sessions in attached Azure File storage

Secure and manage your cloud resources

Whether you are using Windows or Linux, running virtual machines in Azure or on-premises, you must secure and manage your production resources:

- Security is enabled via Azure Security Center
- Monitoring is enabled through App Insights, Network Watcher, Log Analytics and Azure Monitor
- Resources are governed by Azure Policy and Cloudyn
- Backup and business continuity are provided by Azure Backup and Site Recovery

- Security + operations management services
- Azure IaaS resources
- App Insights instrumented
- Azure Backup for point-in-time backup
- Site Recovery backup for disaster recovery



LOG ANALYTICS



- Automate remote network monitoring with packet capture
- Gain insight into your network traffic using flow logs
- Topology view provides a network level view showing the various interconnections and associations between network resources in a resource group

CORE MONITORING

Network Watcher Monitor



- Quickly connect and collect log data from multiple sources
- Correlate and analyze using powerful machine learning constructs
- Search and query interactively using an expressive language
- Develop deep insights using purpose-built management solutions



- Monitor your Azure resources with detailed logs
- Set up alerts and take proactive, automated actions
- Integrate with analytics and notification tools familiar to you

UPDATE MANAGEMENT FOR AZURE VIRTUAL MACHINES

Manage updates for your Linux and Windows machines



- Quickly assess the status of available updates
- Easily install required updates
- Review deployment results to verify updates were applied successfully

AZURE AUTOMATION

Simplify cloud management with process automation



- Eliminate time-consuming, repetitive tasks
- Reuse Bash, PowerShell, and Python scripts and workflows
- Integrated with Web Apps, Virtual Machines, Cloud Services, Storage, and SQL Database

COST MANAGEMENT

Optimize what you spend on the cloud while maximizing cloud potential



- Get rich operational and financial insights
- Enable cost allocation and chargebacks
- Optimize how you use cloud resources
- Improve how you use virtual machine reserved instances

AZURE POLICY

Control cost and resource usage



- Use policies to enable security and management at scale for Azure resources
- Apply policy to a resource group, subscription, or even a management group
- Choose to either enforce policies or audit policy compliance against best practices. Aggregate policies and view compliance for the entire organization