

# THE WHY

# A Pathway to Cloud

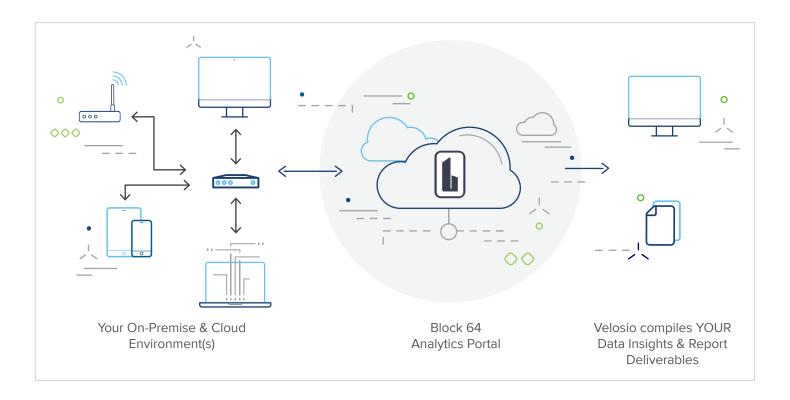
Cloud adoption is on company agendas more than ever before resulting in businesses increasing focus on their IT strategy. With the accelerated pace of technology advancement, the challenge has become how best to shape your cloud enablement strategy and planning efforts on the things that matter to you. Each company's digital journey is unique to them based on what the makeup of the current environment "is", what the company's objectives "are", and the bandwidth of their IT Team, to name a few factors.

#### THE WHAT

Today, the state of technology and integration of business applications requires a deeper review than the naked eye can perform to build an informed plan that supports your objectives. Velosio's modern best practice approach delivers actionable data that highlights opportunities to reduce risk and potential for optimizing your environment to capitalize on savings opportunities through system optimization or cloud migration.

Velosio, in partnership with Microsoft, leverages Block 64, a modern, industry leading technology to execute an in-depth, comprehensive IT asset discovery analyzing your existing infrastructure and applications. The Block 64 application interacts with your onpremises and cloud assets to compile a portrait of your environment.

Velosio's experience team of business applications and cloud advisors then analyzes and assesses your application portfolio leveraging the data results from the Block 64 assessment tool. The Velosio team then prepares reporting and deliverables outlining insights, recommendations, and approaches aligned with your objectives, supporting your team to make informed decisions.



# **THE HOW**

# WHAT IS THE BLOCK 64 DISCOVERY APPLICATION?

Block 64's Discovery Application gathers data about your environment to assist you in uncovering risk, opportunities to optimize, and chances to reduce unnecessary expenditures.

# The Data We Gather:

#### Network

By scanning your internal subnets, we can detect all devices on the network and store their IP addresses.

#### **Software**

From general installed software records to database instances, we collect as much as we can without accessing personal data.

#### Virtual Infrastructure

Collecting virtual management, host, and guest relationships is relevant in cloud readiness and server optimization activities.

#### Hardware

Manufacturer and model information is recorded, as well as hardware specific details like CPU and RAM.

# **Active Directory**

By pulling user and device data from Active Directory, we can gain useful analytical insights as well as have a reference for discovery progress.

# **Usage and Performance**

Activity metering and resource utilization are valuable in assessing your cloud readinessand uncovering optimization opportunities.

The application is designed to be a simple and quick method of gathering discovery data, in scenarios where a simple snapshot is required.

# THE PROCESS

# **DAY 1: SIGNUP & PRELIMINARY DATA COLLECTION**

- The Velosio team connects with key stakeholders of the client's business organization to go over the steps of the engagement
- The purpose of the call is to introduce the client to the Cloud aAssessment team, discuss the upcoming activities, align expectations, and establish timelines
- At the end of the call, we provide you a technical document to assist in deploying the assessment tool within your environment (if assistance is needed it will be provided based on ask)

Deliverable: Pre-Engagement and Block 64 Agent Deployment.

#### DAY 2 " 9: DISCOVERY

- Block 64 agent begins gathering data on your environment to start the process of uncovering risk, opportunities to optimize, and chances to reduce unnecessary expenditures
- Asset inventory is encrypted and securely transferred to a regionally located tier-4 datacenter where it
  is cleansed, categorized, matched, and analyzed for advanced reporting; including installed software
  categorization, license assignment, hardware warranty matching, end-of-support/end-of-life status, and crossreferenced with all known security vulnerabilities:
  - Agentless discovery technology
  - Fast and easy deployment
  - Full hardware and software inventory
  - Capacity and utilization metering
  - Full public cloud connectivity
  - API based integrations
- Identification of assets as they connect to the network, identifies the type and operating system before accessing, inventorying, and monitoring the device be it physical, virtual, on-premises or in the cloud
- Asset inventory will always be current with user specified re-inventory schedule that updates incrementally and continuously. Through integration with Active Directory, allowing real-time visibility into the completeness of inventory and more importantly, what assets may be missing
- The length of data availability is limited and is destroyed after 90 days



# DAY "9 TO 10: DEBRIEF ON FINDINGS & RECOMMENDATION PLANNING

- Based on discovery results, Velosio will provide:
  - Business-ready reporting that will highlight opportunities to reduce risk, optimize existing environment, and capitalize on savings that may exist
  - Current workloads and intelligent optimization recommendations backed by sizing data and utilization readings from discovery reports
  - Affix key data like any maintenance, care packs, warranties, financial, procurement, contractual, and location-based data linked to asset repository
  - A view of highlighted unpatched titles or configurations, end-of-support and/or end-of-life software, RDP vulnerability, and latest ransomware and security risks and hardware within environment

**Deliverable:** Reporting and Execution planning to include comprehensive report delivered by subject matter experts with specific, actionable insights to make an informed business decision on the outcomes of the discovery.

#### **ASSESSMENT SUMMARY**

- A thorough review and assessment of controls and procedures of IT services, common infrastructure, organizational and Service Management process components
- An IT strategy that provides a clear strategic path towards Business Service Management, including Cloud capability
- A roadmap providing a defined set of activities needed for Cloud readiness
- A security and compliance analysis of risks to your organization

#### **ASSESSMENT ADVANTAGES**

- Evaluation by Velosio's experienced Cloud Consultants generates current information about your organization's IT as a solid foundation for successful planning
- The assessment right-sizes your budget and capability estimate, to help avoid overspending and optimize user experience
- Interactive sessions with stakeholders facilitate "buy-in" and aligns solutions with the needs unique to your organization
- Detailed and interactive reports by our experts provides the blueprint for a business case justification as well as performance, reliability, environmental, management and security designs

# GOALS FOR YOUR CLOUD ASSESSMENT

- To help both your company and Velosio as your Microsoft partner gain a thorough understanding of the health and consumption of your business requirements aligned to your technology strategy and how those requirements drive security and cloud enablement
- Deliver our findings, provide recommended best practices, and deliver training where it needs to be addressed
- Provide an actionable roadmap based on your business objectives, requirements, and considerations for migrating workloads to the cloud

Ultimately, the outcome of this assessment will support you to prioritize planning to achieve your objectives and requirements and clearly see the prioritization of key feature implementation tailored around your specific IT and business setting.

# **VELOSIO SERVICE OFFER HIGHLIGHTS**

# HOW WE ARE HELPING CLIENT MITIGATE ANY RISKS IDENTIFIED

A continued outcome could require thewill be mitigation of the risks identifiedfrom the discovery session and deployment of the options from the execution planning. Priority will be given to the threat and vulnerability pairs that have the potential to cause significant mission impact or harm to the business. Also, in safeguarding the businesses' mission and its IT systems. Due to the uniqueness of each business, the approach will be unique andthe appropriate risk mitigation options could require both technical and nontechnical administrative measures.

Following are highlights to services Velosio delivers to support the needs of our clients:



#### **Cloud Enablement Services**

- As an experienced and trusted partner, Velosio provides scalable and cost effective services, support, and technologies to enable both your business and your cloud transformation journey
- Security Planning and Analysis Services support competitive business advantage and mitigate risks by reducing defects and improving the quality of security meeting best practice security policies and standards



# **Design Specifications Services**

- Activities and Deliverables associated with translating End-User and Information System requirements into detailed technical specifications
- Develop and document technical design plans and environment configuration based on client security needs



# **Server Optimization**

- Assist in future endeavors while keeping the impact of existing investments as we evaluate current state based versus longer-term objectives
- Deliver recommendations to improve workload performance and reduce licensing costs
- As well as guidance on the business and technology benefits of server modernization using hybrid and public cloud infrastructures



# **Modern Workplace**

 Follow through with continued guidance on in-depth analysis of user profiles and working groups, existing software deployments and licensing to provide existing or new Microsoft 365 solutions



# Cybersecurity

 Assist in deploying cohesive security strategy to improve overall cybersecurity and asset management procedures, will provide practical recommendations based on internationally recognized CSC and NIST security frameworks



# **Software Categorization & Vendor Analysis**

- Assist in building a foundation for software compliance with a complete software inventory.
   Focus on normalizing all installed software titles for variations in naming, ownership, and localization to identify and build a commercial software portfolio
- License management with a complete inventory of all technology assets across all hybrid environments to reduce compliance risk and cost by identifying over-licensed or under-used software

# **QUESTIONS?**

Following are commonly asked questions our client's have asked regarding: Access Levels, Network Impact, and more.



01

#### Who will have access to my data?

During this engagement, and in order to prepare your deliverable(s), our analysis and support team at Velosio will have the ability to view the data that has been gathered, which will be destroyed after 90 days.

02

#### How much of my time will this take?

The setup of the application takes 10 minutes or less. Once the proper network scope and service accounts are input, the rest is handled by the tool – just leave it running, and let it do its thing. We've worked hard to make this easy!

# **Operating System and Hardware Requirements:**

Recommended: Windows 10 (or Windows Server 2016), 8GB of RAM, CPU w/ 4 cores

**Minimum:** Windows 7 (or Windows Server 2008R2), 4GB of RAM, CPU w/ 2 cores. *If possible, we recommend installing Block 64 Discovery Application on a non-mission critical endpoint to avoid an unlikely scenario of interruptions or slower server response times due to increased workload.* 

#### You'll want to have on hand:

Network: All internal networks in scope; CIDR notation or single IP addresses are accepted

Active Directory: A domain controller per domain in scope; IP address or FQDN formats are accepted

**Windows Inventory:** A service account that has any two of the following 3 levels of access will accomplish inventory:

- Access to C\$
- The ability to run NET RPC / Remote Registry
- Remote (read-only) WMI

Virtual Infrastructure: Read-only administrator credentials for each vCenter Server in scope.

**Linux Inventory:** A local or domain credential with access to files in /proc/. Superuser rights preferred for accurate data collection, but not required.

**Microsoft Office 365:** Your global administrator account, for authentication of our application to gather read-only Office 365 data such as your Secure Score, Usage and Activation data.

#### The Ports We Leverage:

A question we often get leading up to deployment or during troubleshooting is: what ports will your inventory and other processes be leveraging on my network? We have a complete list below – but some good news is that these ports are very rarely – if ever – blocked. Here is the complete list of ports we presently leverage for inventory purposes:

- TCP 135, 1025-5000 and 49152-65535 (wmi)
- TCP 445 (smb v2 / v3 remote procedure calls)
- TCP 139 & 1025 (netbios and alternate netbios)
- UDP 137 (netbios)

- TCP 389 (Idap)
- HTTP/SSL 443 (outbound data access)
- TCP 22 (SSH Linux Inventory)

# **Local Administrator Privileges**

#### Why do we need this?

Our inventory work leverages three Windows services: SMB, WMI and RPC. The most time-effective way to ensure we can communicate using those services is to use a service account with local administrator privileges. If this is a concern, we can also instruct you in enabling access to these services for a specific service account.

# **Domain Administrator Privileges**

#### Why do we need this?

Many servers do not have local administrator accounts – for example, PDC and BDC servers. In those cases, we leverage this privilege level to conduct any inventory activities that would otherwise have leverage local admin privileges / the administrative share. However, as above, an account with Remote Registry and read-only remote WMI can successfully complete an inventory. Domain Administrative privileges are a nice to have but not a must have.

#### **VMware Access**

#### What access do we need?

We need an account on your vCenter server that has read-only access to the complete vSphere environment, including license manager.

This account is typically an account created in a vSphere SSO domain – this can be an SSO domain administrator or a new service account created for the purpose of inventory.

# Why do you need this data?

Microsoft and Oracle products, in particular, base their licensing in many cases on the architecture of the host upon which a guest VM is running. To properly offer licensing advice and ensure a customer is not exposed to compliance risk or overpaying for this software, we must understand the details of the guest/host relationship and the hardware specifications of the host servers.

#### Do you need root access to our ESXi hosts?

Absolutely not. The vCenter SSO account should provide sufficient data regarding your virtual environment.



Shape your cloud enablement strategy and planning efforts on the things that matter to you, based on data that highlights opportunities to reduce risk and the potential areas for optimizing your environment to capitalize on savings through system optimization or cloud migration.

#### Linux Access

#### What access do we need?

In order to inventory Linux machines, we need a local/domain user with rights to access files in the

/proc/ directory. Access to dmidecode and sneep (if installed) would be ideal, but not necessary to have. While an account with superuser rights is nice to have, it is certainly not required.

# **Network Impact**

#### What will the impact to my network be?

- We leverage standard protocols (NetRPC, SMBv2 & v3, etc) that should not cause any alert conditions in a standard environment
- The amount of bandwidth our solution consumes is configurable at the appliance level, or even via your virtualization technology itself.
- In its default settings, our appliance will typically run at 150 250KBp/s, comparable in bandwidth to streaming a standard definition video on YouTube.
- In its maximum settings, our appliance will typically run at up to 1000 KBp/s, comparable in bandwidth to streaming a high-definition video on YouTube.

# Do I need to take any special care with my endpoint protection, antivirus or intrusion detection systems?

As an agentless solution, it is possible, though exceedingly unlikely, that our inventory activities will be detected by IPS or IDS solutions. In these cases, most security solutions offer the ability to allow a solution such as ours to be whitelisted and traverse your network without raising any unnecessary red flags. That said, our traffic largely goes unnoticed by most systems of this type.

# **GET STARTED!**

Contact your Velosio CSM or reach team Velosio at:





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