



Cloud Security Assessment



# Crayon Cloud Security Assessment

Crayon Cloud Security Assessment helps all customers using Microsoft 365 and Microsoft Azure understanding your business risks and exposure to cyberthreats.

Through a data-driven evaluation and analysis, Crayon provides prioritized remediations and recommendations for a safer innovation in Microsoft clouds.

## Crayon Cloud Security Assessment enables you to:

- Get a documented understanding of your current security maturity and posture
- Innovate safely with full confidence in your cloud security posture
- Progress with confidence in your Zero Trust journey following achievable and prioritized steps
- Gain business stakeholders to support your efforts
- Achieve compliance across all relevant security standards



# Product Break-down

## Data Collection

- extensive **scans** and data collection from your **Microsoft 365** and Microsoft **Azure** estate
- in-depth **guided interview** with your IT organization, collecting **organizational, process and awareness** key information
- ! all gathered data remains within your Microsoft Azure tenant.

## Data Driven Analysis

- The gathered data is consolidated and analyzed by Crayon **security experts** following the **CIS Controls v8** to prioritize your Zero Trust journey and have the greatest impact on risk reduction based on current threats
- A **roadmap** is built from the processed data. It addresses the most critical and actionable remediations, while paving the way to your **Zero Trust** journey

## Crayon Cloud Security Assessment Report

- An **executive summary** on the company's security maturity and the necessary initiatives towards a stronger security posture
- Crayon's **prioritized actions and recommendations**, articulated around an actionable short and mid-term **roadmap**
- Identified **critical technical weaknesses** (Microsoft365 & Microsoft Azure, Endpoints)

### 2. Executive summary

Example (Not associated with this example report):  
Your organization's security maturity score is **1.84**.

1	2	3
<b>Basic</b> The cybersecurity posture is ad-hoc, tactical at best and the risks.	<b>Standardized</b> The cybersecurity posture is defined, standards and controls are defined and implemented on best effort basis.	<b>Rationalized</b> The posture is clearly defined, enforced, and automated; processes are centrally controlled.
Cybersecurity risks are significant.	Cybersecurity risks are moderate.	Cybersecurity risks are limited.

Figure 1 - CIS8 overall score

The assessment discovered following key facts:

- XX Vulnerabilities with **Critical** severity
- XX Vulnerabilities with **Medium** severity

Additionally, the assessment uncovered following critical issues in:

- Lack of protected and risk-based Identity & Access management
- Lack of unified security baseline

In its current state, the organization is facing a high risk of data security and with high potential of business-critical process disruptions. To remedy with low complexity:

We suggest following actions to be taken as soon as possible, to reach a sustainable path towards protection and resiliency:

- Launch a patching program to remediate all critical vulnerabilities
- Rollout Multi-Factor Authentication for all devices
- Establish a unified security baseline through automated device management
- Establish a vulnerability management program to track and remediate vulnerabilities early

By applying above-mentioned remediations and enhancements, the organization can significantly improve its security posture.

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### 3. Key Findings & Recommendations

This section contains Crayon's key take-away from the interview with your security team and the technical facts gathered from the assessment. While all recommendations and details are listed in the section 4, below you will find key recommendations, prioritized based on urgency, impact and efforts.

#### Key findings

#	Items	Actions
PF1	MFA has not been enabled for all administrator accounts <b>Threat: Account theft, unapproved access from malicious party, critical customer data exfiltration</b>	<ul style="list-style-type: none"> <li>• Verify reason for lack of MFA</li> <li>• Enforce MFA on all administrator accounts</li> <li>• Use control, alerts, or period checks to maintain a 100% MFA (license upgrade could be suggested)</li> <li>• Refer to Crayon Secured Identity Accelerators</li> </ul>
PF2	Mobile devices not centrally managed, lack of access control from those devices <b>Threat: Critical customer data exfiltration, potentially no visibility on threat actors.</b>	<ul style="list-style-type: none"> <li>• MDM policy should be enforced and maintained strictly to limit data availability to unmanaged devices. Increasing access control</li> <li>• Implement Conditional Access</li> <li>• Refer to Crayon Secured Endpoints Accelerators</li> </ul>
PF3	No Automated Modern Enrollment and Offboarding procedure for users & devices <b>Threat: a weak onboarding &amp; offboarding process leads to a lack of control over company assets and data.</b>	<ul style="list-style-type: none"> <li>• Deploy AutoPilot for Windows, ABM for MacOS and iOS</li> <li>• Include IT in the business processes for on-boarding and off-boarding employees</li> <li>• Plan for regular users and devices clean-ups</li> </ul>
PF4	Conditional Access has not been implemented thoroughly <b>Threat: A key element of the Zero Trust Model has not been implemented. It allows for unapproved access from unmanaged devices or accounts to critical customer data.</b>	<ul style="list-style-type: none"> <li>• Ensure that CA policies cover the group "ALL USERS"</li> <li>• Create a separate group for excluded accounts</li> <li>• Refer to Crayon's Accelerator for Conditional Access</li> </ul>
PF5	3rd party Application Risk Management <b>Threat: All applications can potentially access the company data. Missed security updates to 3rd party applications pose severe CVE security risks. Cloud application expansion not controlled.</b>	<ul style="list-style-type: none"> <li>• List and assign ownership for all of 3rd party (+Cloud) apps</li> <li>• Deploy and operate Defender for Cloud Apps (license upgrade might be needed)</li> <li>• Manage 3<sup>rd</sup> party applications access with CA policies</li> <li>• Plan for regular 3<sup>rd</sup>-party apps access clean-ups</li> <li>• Refer to Crayon's Secured Posture accelerators</li> </ul>

## Example of collected data

All gathered data is stored in customer's tenant.

### OS:

- version, supported or not supported by security updates, End of Life

### Devices:

- Microsoft Intune list, inactive devices, active devices
- Missing security updates on endpoints
- Manually flagged endpoints
- Bitlocker disabled on how many devices
- Firewalls status

### Applications:

- Installed applications on endpoints, version, risk level

### User accounts:

- Admin account, amounts and types (both Microsoft AAD and AD), MFA level
- enabled and disabled accounts, inactive accounts (30 and 90 days)
- Microsoft AAD external users, users without MFA, total enabled users

### Endpoint security level (spec. services):

- PowerShell exe level, RDP level, SMB level
- Antivirus overview

### Email protection:

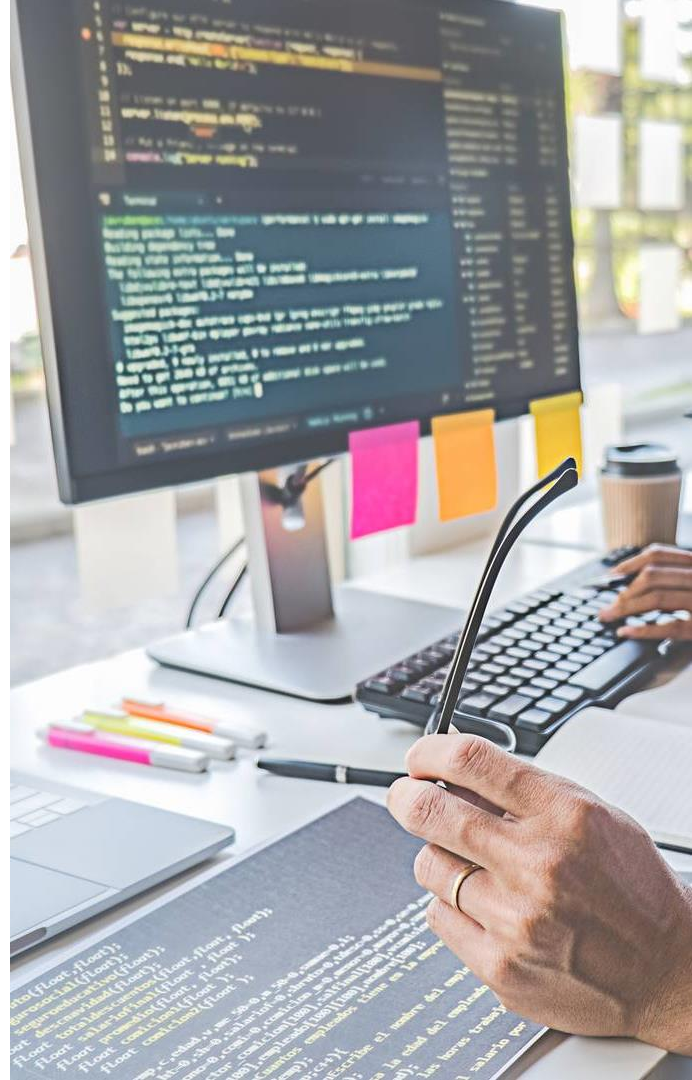
- SPF, DKIM and DMARC records

### Microsoft365:

- Potential PII data based on customer and consultant PII word list, Microsoft365 Secure Score
- Microsoft SharePoint external document sharing based on PII listing

### Microsoft Azure resources:

- Azure Storage account security level (TLS, unencrypted sharing, SMB level)
- Azure SQL transparent encryption level
- Azure Secure Score
- Azure NSG rules
- Azure Secure Score



## Break-down and delivery plan

### Offer and decision

- Scope and offer adjustment
- Approval
- Contract signature

### Delivery kick-off, data gathering

- Kick-off workshop
- Solution deployment in customer tenant
- Technical scan
- OpSec maturity assessment

### Assessment conclusions

- Delivery of the assessment report
- Presentation of keys findings and recommendations
- Closing and next steps towards stronger security

Week xx-yy 2022

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Week xx 2022