

Encryption standards and data integrity measures implemented in M365 Manager Plus



ManageEngine M365 Manager Plus is a comprehensive solution that can generate reports as well as manage, audit, and monitor the objects and data within your Microsoft 365 environment. Several measures have been taken to ensure that the data processed in the product is handled securely and that its integrity is not tampered with. This document outlines the various encryption and data integrity methods implemented to ensure the safety of all the data gathered and handled by M365 Manager Plus.

The data processed in the different modules of M365 Manager Plus is secured using a range of encryption algorithms. These include:

- **AES-256:** This robust, efficient algorithm is used to encrypt the passwords of the product database and audit logs from Microsoft 365.
- **SSL:** This cryptographic protocol is used to ensure the integrity and security of the emails, notifications, and log traffic in the product.
- **Bcrypt:** This password hash function is used to securely store the passwords of the built-in technician accounts.
- **TLS:** This protocol secures the data of the audit, alert, and monitoring modules and ensures the integrity of the emails and notifications from the product.
- **HTTPS:** This is used by the web browser (client) to secure the communications that are sent out to the M365 Manager Plus server and Microsoft 365 servers.

Here is how the data in each module of M365 Manager Plus is processed and secured:



1. Data collection

- a. M365 Manager Plus uses PowerShell, the Microsoft Graph API, and REST APIs to collect data from Microsoft 365 and execute any actions in your Microsoft 365 environment. This is secured using HTTPS. This ensures that none of the data transferred between the client and the M365 Manager Plus server is tampered with. The collected information is stored in configured databases and can be accessed as reports. Sensitive data is not stored in the scripts or API calls, and only the necessary information is used in the calls for interacting with Microsoft 365 servers.
- b. All the actions carried out by users in M365 Manager Plus are recorded in an audit report and stored in the product database. This makes it convenient to track unplanned operations, privilege abuse, and untimely logins.
- c. You can archive audit log data beyond the standard 180-day limit of Microsoft 365. This archive can be stored on the same server or on a remote server by using a log forwarder. The security of the archived data is ensured by setting up a password of your choice and encrypting it using the AES-256 protocol.



2. Secure communications

- a. The browser client can be accessed by entering the IP address or host name and the port number of the M365 Manager Plus server as the URL. Communications between the client and the server can be secured by enabling HTTPS after applying an SSL certificate.
- b. All communications and API calls from M365 Manager Plus to Microsoft 365 servers are secured using HTTPS.
- c. The reliable delivery of log messages is ensured with TCP.
- d. A mail server can be configured to send product notifications, alerts, and emails to technicians in M365 Manager Plus. If you use SMTP to authenticate the mail servers, you can choose to use OAuth to secure your authentication better. You can also set up Microsoft or Google mailboxes to act as servers using their respective API authentication.
- e. The JavaMail API used for emails and notifications is encrypted using SSL and TLS algorithms.
- f. Integrations with other ManageEngine products, like AD360, are secured using authentication tokens. Communications between these products are conducted through HTTPS.



3. Microsoft 365 and PII data security

- a. Data backed up using the Exchange Online Backup add-on can be encrypted with a password of your choice using the AES-256 encryption standard.
- b. Reports generated with M365 Manager Plus can be exported and stored locally on the server or emailed. They can be exported as a password-protected ZIP file. You can create a password of your choice, and it will be encrypted using AES-256 and stored in the product database.



4. Database security

- a. M365 Manager Plus has a built-in PostgreSQL database. You can also configure an external Microsoft SQL Server or PostgreSQL database for product data. This database stores all the product settings, including audit, monitoring, and report profiles, as well as technician information. To protect sensitive data, the database is password-protected and encrypted with CrypTag using AES-256. The encryption key is also encrypted using CrypTag with AES-256.

- b. In addition to the database, M365 Manager Plus also leverages Elasticsearch for faster performance. All audit, alert, and monitoring data, along with data backed-up using the Exchange Online Backup add-on, is stored here. Access to this data is restricted to the Elasticsearch API and the product's certificate. The Search Guard plug-in for Elasticsearch guarantees the secure transfer of Elasticsearch data when TLS is employed.



5. Authentication for Microsoft 365 and Active Directory technicians

- a. M365 Manager Plus supports adding users from Microsoft 365 and Active Directory as help desk technicians.
- b. Microsoft 365 users will be redirected to Microsoft 365's login page, where the authentication will take place. Once they log in to Microsoft 365, they will be redirected to M365 Manager Plus.
- c. Active Directory users will be authenticated in M365 Manager Plus with Kerberos and NTLM authentication.
- d. The passwords of the default technicians are hashed and stored in the configured database using bcrypt encryption.

Our Products

AD360 | Log360 | ADManager Plus | ADAudit Plus | ADSelfService Plus
Exchange Reporter Plus | RecoveryManager Plus

ManageEngine M365 Manager Plus

ManageEngine M365 Manager Plus is a web-based, one-stop solution for Microsoft 365 reporting, auditing, management and monitoring that helps simplify Microsoft 365 governance, administration and security. M365 Manager Plus enables admins to gain visibility into various Microsoft 365 components and display key insights through more than 700 out-of-the-box reports. It eliminates the need for writing complex PowerShell scripts and reduces costs associated with administering Microsoft 365. For more information about M365 Manager Plus, visit <https://www.manageengine.com/microsoft-365-management-reporting/>.

\$ Get Quote

↓ Download