**SharePoint Health Analyzer**.

analyse and resolve issues related to security, performance, configuration, and availability.

1. **Access Central Administration**:
   * Open the SharePoint Central Administration website.
   * On the home page, click on **Monitoring**.
2. **Review Health Analyzer Rules**:
   * Under the **Health Analyzer** section, click on **Review rule definitions**.
   * [Here, you can see predefined rules that run at scheduled intervals (hourly, daily, weekly, monthly) to check various aspects of your SharePoint environment1](https://learn.microsoft.com/en-us/sharepoint/technical-reference/sharepoint-health-analyzer-rules-reference).
3. **Configure Health Rules**:
   * You can accept the default settings for each health rule or customize them.
   * To configure a rule, click on it, then click **Edit Item**. [You can adjust fields like the rule’s title, scope, schedule, and whether it should attempt automatic repairs2](https://learn.microsoft.com/en-us/sharepoint/administration/configure-sharepoint-health-analyzer-rules).
4. **View Health Reports**:
   * On the Monitoring page, in the Reporting section, click **View health reports**.
   * [Select the report you want to view, set the data criteria, and click **Go** to see detailed information3](https://learn.microsoft.com/en-us/SharePoint/administration/monitoring-planning).
5. **Use PowerShell for Advanced Checks**:
   * [For more detailed server health status checks, you can use PowerShell scripts to monitor CPU usage, drive utilization, and memory utilization4](https://learn.microsoft.com/en-us/sharepoint/administration/view-health-reports).

**Resource Throttling Settings**

**1. File Size Limit**

* **Description**: This property sets the maximum file size that can be uploaded to SharePoint. The default limit is 2 GB, but it can be increased up to 10 GB.
* **Location**: Central Administration > Manage Web Applications > General Settings > Maximum Upload Size.

**2. List View Threshold**

* **Description**: This property limits the number of items that can be retrieved in a single view. The default threshold is 5,000 items to prevent performance issues.
* **Location**: Central Administration > Manage Web Applications > General Settings > Resource Throttling.

**3. List View Lookup Threshold**

* **Description**: This property limits the number of lookup, person/group, or workflow status fields that can be included in a list view. The default threshold is 12 columns.
* **Location**: Central Administration > Manage Web Applications > General Settings > Resource Throttling.

**4. List Item Limit**

* **Description**: This property sets the maximum number of items that can be stored in a single list. The default limit is 30,000,000 items.
* **Location**: Central Administration > Manage Web Applications > General Settings > Resource Throttling.

**5. Site Collection Storage Quota**

* **Description**: This property sets the storage limit for a site collection. It helps manage storage consumption and prevent overuse.
* **Location**: Central Administration > Application Management > Configure Quotas and Locks.

**6. Content Database Size Limit**

* **Description**: This property sets the maximum size for a content database. The default limit is 200 GB for general usage and 4 TB for all usage.
* **Location**: Central Administration > Manage Content Databases.

**7. Number of Site Collections per Content Database**

* **Description**: This property sets the maximum number of site collections that can be stored in a single content database. The default limit is 10,000 site collections.
* **Location**: Central Administration > Manage Content Databases.

**8. Number of Subsites per Site Collection**

* **Description**: This property sets the maximum number of subsites that can be created within a single site collection. The default limit is 2,000 subsites.
* **Location**: Central Administration > Manage Site Collections.

**9. Number of Web Applications per Farm**

* **Description**: This property sets the maximum number of web applications that can be created within a SharePoint farm. The default limit is 20 web applications.
* **Location**: Central Administration > Manage Web Applications.

**10. Number of Application Pools per Web Server**

* **Description**: This property sets the maximum number of application pools that can be created on a single web server. The default limit is 10 application pools.
* **Location**: Central Administration > Manage Web Applications.

**Causes and Resolution Tips for SharePoint Library Unavailability (Library Exceeding Threshold)**

**Causes:**

1. **List View Threshold Exceeded**:
   * **Description**: SharePoint has a default list view threshold of 5,000 items to prevent performance issues. When a library exceeds this threshold, it can become unavailable or slow to respond.
   * **Impact**: Users may experience delays or inability to access the library.
2. **Large Number of Lookup Columns**:
   * **Description**: Having too many lookup columns in a list or library can cause performance issues. The default limit is 12 lookup columns.
   * **Impact**: This can lead to slow performance or unavailability of the library.
3. **Complex Queries**:
   * **Description**: Complex queries that involve multiple joins or filters can exceed the threshold limits, causing the library to become unavailable.
   * **Impact**: Users may face delays or errors when trying to access the library.
4. **Large File Sizes**:
   * **Description**: Uploading or storing large files can contribute to exceeding the threshold limits.
   * **Impact**: This can slow down the library or make it unavailable.

**Resolution Tips:**

1. **Increase List View Threshold**:
   * **Action**: Increase the list view threshold in Central Administration.
   * **Steps**:
     1. Go to Central Administration.
     2. Navigate to Manage Web Applications.
     3. Select the web application and click on General Settings.
     4. Adjust the List View Threshold under Resource Throttling.
2. **Optimize Lookup Columns**:
   * **Action**: Reduce the number of lookup columns in the library.
   * **Steps**:
     1. Review the library schema.
     2. Remove or consolidate unnecessary lookup columns.
3. **Simplify Queries**:
   * **Action**: Simplify the queries used in views or workflows.
   * **Steps**:
     1. Review the queries for complexity.
     2. Optimize or break down complex queries into simpler ones.
4. **Increase File Size Limit**:
   * **Action**: Increase the maximum file size limit in Central Administration.
   * **Steps**:
     1. Go to Central Administration.
     2. Navigate to Manage Web Applications.
     3. Select the web application and click on General Settings.
     4. Adjust the Maximum Upload Size.
5. **Use Indexed Columns**:
   * **Action**: Index columns that are frequently used in filters or queries.
   * **Steps**:
     1. Go to the library settings.
     2. Select Indexed Columns.
     3. Add indexes to the columns used in views or queries.
6. **Enable Daily Time Window for Large Queries**:
   * **Action**: Configure a daily time window during which large queries can be executed without being throttled.
   * **Steps**:
     1. Go to Central Administration.
     2. Navigate to Manage Web Applications.
     3. Select the web application and click on General Settings.
     4. Configure the Daily Time Window under Resource Throttling.