



White Paper

Mobile Device Management

Fabasoft Folio 2023 Update Rollup 2

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1 Introduction

The Fabasoft Folio App for iOS and Android can be configured via a Mobile Device Management System (MDM).

Most MDM settings are considered as preferred settings, which means that changes made by the user itself are not overridden.

Settings that can be forced require setting a separate key. This key must have the prefix of the key to force and must end with `.Forced`.

Settings that are force by default have the prefix `.Forced`.

The configuration will be evaluated as defined by the following matrix:

| Configured by User | Configured by MDM | Forced by MDM | Result |
|--------------------|-------------------|---------------|--------------------|
| | | | Default Value |
| | X | | Configured by MDM |
| | | X | Default Value |
| | X | X | Configured by MDM |
| X | | | Configured by User |
| X | X | | Configured by User |
| X | | X | Configured by User |
| X | X | X | Configured by MDM |

2 Apple iOS

The Fabasoft Folio app supports the following MDM settings:

| Key | Type | Required | Description |
|-----------------------------------|---------|----------|--|
| ShowSupportWhenUserShake | boolean | no | Defines whether the support dialog should be opened when the user shakes the device. Value can be true OR false. |
| ShowSupportWhenUserShake.Forced | boolean | no | Defines whether the setting for ShowSupportWhenUserShake should be forced from MDM. Value can be true OR false. |
| ShowSupportWhenUserTakeScreenshot | boolean | no | Defines whether the support dialog should be opened when the user |

| | | | |
|--|---------|----|--|
| | | | takes a screenshot. Value can be true or false. |
| ShowSupportWhenUserTakeScreenshot.Forced | boolean | no | Defines whether the setting for ShowSupportWhenUserTakeScreenshot should be forced from MDM. Value can be true or false. |
| ShowPreviewForWorklistFolders | boolean | no | Defines whether folders opened from the worklist should be shown as PDF overview. Value can be true or false. |
| ShowPreviewForWorklistFolders.Forced | boolean | no | Defines whether the setting for ShowPreviewForWorklistFolders should be forced from MDM. Value can be true or false. |
| SyncOnLan.Disabled.Forced | boolean | no | Defines whether the feature LAN synchronization is available. Value can be true or false. |
| SyncOnLan.Port.Forced | integer | no | Defines the port which will be used for the LAN synchronization service. |
| SyncOnLan.SSIDs | array | no | Defines the trusted networks in which LAN synchronization can be used. The defined values from MDM cannot be altered by the user. The user might define additional trusted networks. Value must be an array of strings. |
| SyncOnLan.SSIDs.Forced | boolean | no | Defines whether the setting for SyncOnLan.SSIDs should be forced from MDM. Value can be true or false. |
| Services | array | no | Defines the available services for the user. Value must be an array of dictionaries, see description below. |
| Services.Forced | boolean | no | Defines whether the setting for Services should be forced from MDM. Value can be true or false. When true, all other defined services will be removed and adding new services is disabled. When false, the services will be added to the list of available services. |

| | | | |
|------------------|---------|----|--|
| OptionalPasscode | boolean | no | Defines whether the user can decide if the passcode should be activated or disabled. When not set the passcode is always active and cannot be disabled. Value can be <code>true</code> OR <code>false</code> . |
|------------------|---------|----|--|

Each entry in the `Services` array is a dictionary (`dict`) and must contain the following settings:

| Key | Type | Required | Description |
|-----------------------------------|----------------------|----------|---|
| <code>Service</code> | <code>dict</code> | yes | Dictionary container for values. |
| <code>Service.URL</code> | <code>string</code> | yes | Defines the webserver URL. Value must be a valid URL. |
| <code>Service.Name</code> | <code>string</code> | yes | Defines the name for the service. Value can be any string. |
| <code>Service.LoginMethod</code> | <code>integer</code> | no | Defines the login method for the service. Value can be 1 (basic authentication), 2 (client certificate authentication) or 3 (single sign-on). |
| <code>Service.Username</code> | <code>string</code> | no | Defines the user's login username for the service. Value can be empty or any string. |
| <code>Service.KeepSignedIn</code> | <code>boolean</code> | no | Defines whether the user should stay logged in. Value can be <code>true</code> or <code>false</code> . |
| <code>Service.DomainType</code> | <code>string</code> | no | Defines the domain type of the service. Value can be "Folio", "eGov" or "Cloud". |
| <code>Service.Forced</code> | <code>boolean</code> | no | Defines whether the settings "LoginMethod", "Username" and "KeepSignedIn" should be forced from MDM. Value can be <code>true</code> or <code>false</code> . When <code>true</code> , all valid values will be forced. When <code>false</code> , the MDM values will be used when no user configured values are available. |

2.1 Example

Configuration Example

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>ShowSupportWhenUserShake</key>
  <false/>
  <key>ShowSupportWhenUserShake.Forced</key>
  <false/>
  <key>ShowSupportWhenUserTakeScreenshot</key>
  <true/>
  <key>ShowSupportWhenUserTakeScreenshot.Forced</key>
  <false/>
  <key>ShowPreviewForWorklistFolders</key>
  <true/>
  <key>ShowPreviewForWorklistFolders.Forced</key>
  <true/>
  <key>SyncOnLan.Disabled.Forced</key>
  <false/>
  <key>SyncOnLan.Port.Forced</key>
  <integer>17096</integer>
  <key>SyncOnLan.SSIDs</key>
  <array>
    <string>My WiFi1 SSID</string>
    <string>My WiFi2 SSID</string>
  </array>
  <key>SyncOnLan.SSIDs.Forced</key>
  <false/>
  <key>Services</key>
  <array>
    <dict>
      <key>Service.Name</key>
      <string>My Fabasoft Folio</string>
      <key>Service.URL</key>
      <string>https://myfolio.example.com/fsc</string>
      <key>Service.LoginMethod</key>
      <integer>1</integer>
      <key>Service.Username</key>
      <string>MyUser</string>
      <key>Service.KeepSignedIn</key>
      <true/>
      <key>Service.DomainType</key>
      <string>Folio</string>
      <key>Service.Forced</key>
      <false/>
    </dict>
  </array>
  <key>Services.Forced</key>
  <true/>
  <key>OptionalPasscode</key>
  <true/>
</dict>
</plist>

```

2.2 Alternative Format for Services Configuration

Some MDM systems do not support nested dictionaries (`dict`), therefore it is not possible to configure services using the key "Services". As an alternative services can be configured using multiple arrays. To use the alternative format the key "Services" must be replaced with the following values:

| Key | Type | Required | Description |
|-------------------|-------|----------|--|
| Services.List.URL | array | no | Defines the available services for the user. Value must be an array of strings, see description below. |

| | | | |
|---|-------|----|--|
| <code>Services.List.Name</code> | array | no | Defines the available services for the user. Value must be an array of strings, see description below. |
| <code>Services.List.LoginMethod</code> | array | no | Defines the login methods for the services. Value must be an array of integers, see description below. |
| <code>Services.List.Username</code> | array | no | Defines the users' login usernames for the services. Value must be an array of strings, see description below. |
| <code>Services.List.KeepSignedIn</code> | array | no | Defines whether the users should stay logged in. Value must be an array of booleans, see description below. |
| <code>Services.List.DomainType</code> | array | no | Defines the domain types of the services. Value must be an array of strings, see description below. |
| <code>Services.List.Forced</code> | array | no | Defines whether the settings "LoginMethod", "LoginMethod" and "KeepSignedIn" should be forced from MDM. Value must be an array of booleans, see description below. |

Each entry in the `Services.List.Name/Services.List.URL` array is a string (`string`). The number of entries in both arrays must match.

The entries in `Services.List.Name` define the names for the services. Values can be any string.

The entries in `Services.List.URL` define the URLs for the services. Values must be unique. Values must be a valid URL.

Multiple services with the same URL are not allowed. When multiple services with the same URL are configured, the name from the last configured entry will be used.

All other keys starting with `Services.List` are optional and can be omitted, but if a key is specified the number of its entries must match `Services.List.Name/Services.List.URL`.

For possible values of settings starting with `Services.List` see their equivalent settings in chapter 2 "Apple iOS".

2.2.1 Example

Configuration Example

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
<key>Services.List.Name</key>
<array>
<string>My Fabasoft Folio</string>
</array>
```



```

<key>Services.List.URL</key>
<array>
  <string>https://myfolio.example.com/fsc</string>
</array>
<key>Services.List.LoginMethod</key>
<array>
  <integer>1</integer>
</array>
<key>Services.List.Username</key>
<array>
  <string>MyUser</string>
</array>
<key>Services.List.KeepSignedIn</key>
<array>
  <true/>
</array>
<key>Services.List.DomainType</key>
<array>
  <string>Folio</string>
</array>
<key>Services.List.Forced</key>
  <false/>
</array>
</dict>
</plist>

```

3 Android

The Fabasoft Folio app supports the following MDM settings:

| Key | Type | Required | Description |
|--------------------------------------|---------|----------|---|
| ShowSupportWhenUserShake | boolean | no | Defines whether the support dialog should be opened when the user shakes the device. Value can be <code>true</code> or <code>false</code> . |
| ShowSupportWhenUserShake.Forced | boolean | no | Defines whether the setting for ShowSupportWhenUserShake should be forced from MDM. Value can be <code>true</code> or <code>false</code> . |
| ShowPreviewForWorklistFolders | boolean | no | Defines whether folders opened from the worklist should be shown as PDF overview. Value can be <code>true</code> or <code>false</code> . |
| ShowPreviewForWorklistFolders.Forced | boolean | no | Defines whether the setting for ShowPreviewForWorklistFolders should be forced from MDM. Value can be <code>true</code> or <code>false</code> . |
| SyncOnLan.Disabled.Forced | boolean | no | Defines whether the feature LAN synchronization is available. Value can be <code>true</code> or <code>false</code> . |
| SyncOnLan.Port.Forced | integer | no | Defines the port which will be used for the LAN synchronization service. |

| | | | |
|------------------------|--------------|----|--|
| SyncOnLan.SSIDs | bundle_array | no | Defines the trusted networks in which LAN synchronization can be used. The defined values from MDM cannot be altered by the user. The user might define additional trusted networks. Value must be an array of bundles, see description below. |
| SyncOnLan.SSIDs.Forced | boolean | no | Defines whether the setting for SyncOnLan.SSIDs should be forced from MDM. Value can be true or false. |
| Services | bundle_array | No | Defines the available services for the user. Value must be an array of bundles, see description below. |
| Services.Forced | boolean | no | Defines whether the setting for Services should be forced from MDM. Value can be true or false. When true, all other defined services will be removed and adding new services is disabled. When false, the services will be added to the list of available services. |
| OptionalPasscode | boolean | no | Defines if the passcode is optional or not. Value can be true or false. |

Each entry in the SyncOnLan.SSIDs array is a bundle and must contain the following values:

| Key | Type | Required | Description |
|----------------------|--------|----------|---|
| SyncOnLan.SSID | bundle | yes | Bundle container for value. |
| SyncOnLan.SSID.Value | string | yes | Defines the SSID of a trusted network in which LAN synchronization can be. Value can be any string. |

Each entry in the Services array is a bundle and must contain the following settings:

| Key | Type | Required | Description |
|--------------|--------|----------|--|
| Service | bundle | yes | Bundle container for values. |
| Service.Name | string | yes | Defines the name for the service. Value can be any string. |

| | | | |
|----------------------|---------|-----|---|
| Service.Url | string | yes | Defines the webserver URL. Value must be a valid URL. |
| Service.LoginMethod | integer | no | Defines the login method for the service. Value can be 1 (basic authentication), 2 (client certificate authentication) or 3 (single sign-on). |
| Service.Username | string | no | Defines the user's login username for the service. Value can be empty or any string. |
| Service.KeepSignedIn | boolean | no | Defines whether the user should stay logged in. Value can be <code>true</code> or <code>false</code> . |
| Service.DomainType | string | no | Defines the domain type of the service. Value can be "Folio", "eGov" or "Cloud". |
| Service.Forced | boolean | no | Defines whether the settings "LoginMethod", "Username" and "KeepSignedIn" should be forced from MDM. Value can be <code>true</code> or <code>false</code> . When <code>true</code> , all valid values will be forced. When <code>false</code> , the MDM values will be used when no user configured values are available. |

3.1 Example

Configuration Example

```
<restrictions xmlns:android="http://schemas.android.com/apk/res/android">
  <restriction
    android:defaultValue="true"
    android:key="ShowSupportWhenUserShake"
    android:restrictionType="bool">
  </restriction>
  <restriction
    android:defaultValue="false"
    android:key="ShowSupportWhenUserShake.Forced"
    android:restrictionType="bool">
  </restriction>
  <restriction
    android:defaultValue="false"
    android:key="ShowPreviewForWorklistFolders"
    android:restrictionType="bool">
  </restriction>
  <restriction
    android:defaultValue="false"
    android:key="ShowPreviewForWorklistFolders.Forced"
    android:restrictionType="bool">
  </restriction>
  <restriction
    android:defaultValue="false"
    android:key="SyncOnLan.Disabled.Forced"
    android:restrictionType="bool">
  </restriction>
</restrictions>
```

```

</restriction>
<restriction
  android:defaultValue="17096"
  android:key="SyncOnLan.Port.Forced"
  android:restrictionType="integer"
</restriction>
<restriction
  android:key="SyncOnLan.SSIDs"
  android:restrictionType="bundle_array">
  <restriction
    android:key="SyncOnLan.SSID"
    android:restrictionType="bundle">
    <restriction
      android:defaultValue=""
      android:key="SyncOnLan.SSID.Value"
      android:restrictionType="string">
    </restriction>
    </restriction>
  </restriction>
</restriction>
<restriction
  android:defaultValue="false"
  android:key="SyncOnLan.SSIDs.Forced"
  android:restrictionType="bool">
</restriction>
<restriction
  android:key="Services"
  android:restrictionType="bundle_array">
  <restriction
    android:key="Service"
    android:restrictionType="bundle">
    <restriction
      android:defaultValue="My Fabasoft Folio"
      android:key="Service.Name"
      android:restrictionType="string">
    </restriction>
    <restriction
      android:defaultValue="https://myfolio.example.com/fsc"
      android:key="Service.Url"
      android:restrictionType="string">
    </restriction>
    <restriction
      android:defaultValue="1"
      android:key="Service.LoginMethod"
      android:restrictionType="integer">
    </restriction>
    <restriction
      android:defaultValue="MyUser"
      android:key="Service.Username"
      android:restrictionType="string">
    </restriction>
    <restriction
      android:defaultValue="true"
      android:key="Service.KeepSignedIn"
      android:restrictionType="bool">
    </restriction>
    <restriction
      android:defaultValue="Folio"
      android:key="Service.DomainType"
      android:restrictionType="string"
      android:title="Domain type of the service">
    </restriction>
    <restriction
      android:defaultValue="false"
      android:key="Service.Forced"
      android:restrictionType="bool">
    </restriction>
  </restriction>
  </restriction>
</restriction>
<restriction
  android:defaultValue="false"
  android:key="Services.Forced"
  android:restrictionType="bool">
</restriction>
<restriction
  android:defaultValue="false"

```

```
    android:key="OptionalPasscode"  
    android:restrictionType="bool">  
  </restriction>  
</restrictions>
```