

MyBible Registry Format

Revision 2022-06-13

History of Changes

Revision 2022-06-13

- Updated the location of production and test registry copies to list only servers being used now.

Revision 2021-01-15

- Clarified that messages[i].app_version_from and messages[i].app_version_to are string versions of the app (e.g. "5.2.1").

Revision 2020-05-06

- Updated the location of production and test registry copies to what Oleg currently uses.

Revision 2018-10-28

- Added the "SUPPORT" communications category.

Revision 2018-06-03

- Added the "aln" field.

Revision 2018-05-01

- Added the "dep" field.

Revision 2018-03-08

- Added the "lst" field.

Revision 2018-01-16

- Added the action "openSettings".
- Added the message attributes "display_condition", "display_condition_value".

Revision 2017-10-01

- Corrected (made up-to-date) the URLs for registry downloading.
- Added the "info_url" attribute of the "registries" element of the Registry JSON structure.
- Added the "Registry Info File" section at the end.

Revision 2017-06-02

- Recorded the special interpretation of an asterisk at the beginning of the field downloads[i].lic.

Revision 2017-03-25

- Added the field `downloads[i].lic`.

Revision 2017-12-26

- Information is provided for attributes of the "messages" section on whether their values are required or optional.
- "login" and "password" parameters removed from the "openWebSite" predefined action.
- Corrected parameter names for the "openGooglePlay" and "openActivity" predefined actions.

Revision 2017-12-23

- Added the "version" attribute.

Revision 2017-12-17

- Added the "registries" attribute/section.
- Added the "communications" attribute/section.
- Removed an array for operating system-related attributes, kept a single set of them per message.
- Added double quotes around attribute names, because iOS parsers, unlike Android ones (e.g. GSON) do not support attribute names not enclosed into double quotes.

Revision 2017-12-16

- Added host priority and weight.
- Corrected naming and placement of operating system-related attributes.
- Updated URLs of the registry downloading.

Revision 2017-12-10

- Created an initial draft of this document.

Overview

This document defines the structure of the MyBible Registry that describes the downloadable modules and some additional information for the application.

The MyBible Registry is a JSON file that is stored in the cloud either in the plain text form or in a zipped form.

There are several fixed URLs where the MyBible Registry is stored. All these URLs point to the same content, stored on several different servers for reliability. All these URLs are hardcoded into the MyBible application. When MyBible needs the Registry, it randomly selects a URL to try and proceeds to other URLs if the tried one has failed.

Production Registry copies:

- <https://dl.dropbox.com/s/peatcjj6azrnj0u/registry.zip>
 - https://dl.dropbox.com/s/1odi2f2tyn1oqyx/registry_info.json
- <http://mph4.ru/registry.zip>

- http://mph4.ru/registry_info.json
- <http://s3.igrnt.info/registry.zip>
 - http://s3.igrnt.info/registry_info.json
- <http://myb.1gb.ru/registry.zip>
 - http://myb.1gb.ru/registry_info.json
- <http://mybible.i-t.kz/registry.zip>
 - http://mybible.i-t.kz/registry_info.json

Test Registry copies:

- http://mybible.i-t.kz/registry_test.zip
 - http://mybible.i-t.kz/registry_test_info.json
- http://s3.igrnt.info/registry_test.zip
 - http://s3.igrnt.info/registry_test_info.json

Registry JSON Structure

```
{
  "version": <version identification integer>,
  "hosts":
  [
    {
      "alias": "<how the host is referred to in URLs of downloads>",
      "path": "<common part of URLs pointing to this host>",
      "priority": <1 | 2>,
      "weight": <nnn>
    },
    ...
  ],
  "downloads":
  [
    {
      "abr": "<module abbreviation>",
      "lng": "<module language>",
      "aln": "<module articles language>",
      "reg": "<module region>",
      "des": "<module description>",
      "lds":
      [
        {
          "lng": "<module description language>",
          "des": "<module description in the specified language>"
        },
        ...
      ]
    }
  ]
}
```

```
    ...
],
"inf": "<module detailed info>",
"fil": "<module file name>",
"upd": "<module update date>",
"cmt": "<module update comments>",
"def": <indication of default downloadable, true or false>,
"url":
[
    "<downloading URL 1>",
    "<downloading URL 2>",
    ...
],
"siz": "<download size>",
"hid": <indication of a hidden module, true or false>
},
...
],
"messages":
[
{
    "id": "<message id>",
    "date": "<message date>",
    "type": "<predefined message type>",
    "text":
    [
        {
            "lng": "<message language>",
            "txt": "<message text>",
            "ok": "<confirm button caption>",
            "cancel": "<cancel button caption>"
        },
        ...
    ],
    "localization":
    [
        "<MyBible localization language>",
        ...
    ],
    "os_name": "<OS name>",
    "os_version_from": "<operating system version>",
    "os_version_to": "<operating system version>",
    "app_version_from": "<app version>",
    ...
]
```

```

    "app_version_to": "<app version>",
    "display_interval": "<minimal interval between two messages>",
    "display_until": "<date after which the message is invalid>",
    "display_count": <number of times to show>,
    "display_condition": "<some expression that the app
understands>",
    "display_condition_value": "<a value of display_condition for
which the message is to be shown>",
    "action": "<predefined action name, if accepted by user>",
    "params":
    [
        {
            "name": "<action parameter name>",
            "value": "<action parameter value>"
        },
        ...
    ]
},
...
],
"registries":
[
    {
        "url": "<URL to download the Registry file>",
        "info_url": "<URL to download the Registry Info File>",
        "test": <true|false>,
        "priority": <1|2>
    },
    ...
],
"communications":
[
    {
        "category": "<predefined communication category>",
        "type": "<predefined type of communication>",
        "to": "<address to send to>",
    },
    ...
]
}

```

The following table provide additional information on the JSON attributes described above.

Attribute	Description
version	Registry version. Each registry update increases the value of this attribute by some amount (the value is related to the registry generation time). This field enables MyBible to ignore an old registry copy that can be potentially left not updated at some downloading places.
hosts	Optional array of items that allow shortening of URLs for individual downloads, to reduce an overall size of the Registry.
hosts[i].path	<p>Java string format describing a URL template. A single argument of this format is assumed to be a variable part of download URL for a concrete file.</p> <p>Example:</p> <p>path: "https://drive.google.com/uc?export=download&id=%s" where a concrete ID of a downloadable will replace %s.</p>
hosts[i].alias	<p>Alias by which this particular host can be referred to in a URL of a concrete downloadable.</p> <p>Example:</p> <p>alias: "gdrv"</p>
hosts[i].priority	<p>1 - high priority 2 - low priority</p> <p>MyBible will try to download modules from hosts with high priority and, if unsuccessful, from hosts with low priority</p>
hosts[i].weight	An integer "weight" of a host that defines a probability of a host selection.
downloads	Mandatory list of downloadables.
downloads[i].abr	<p>Abbreviation of a downloadable.</p> <p>Note that a single downloadable may contain several modules (e.g. a Bible translation, a commentaries/footnotes module for it, a custom theme for this module). All modules in a downloadable are assumed to have the same abbreviation but different types.</p>
downloads[i].lng	Android-specific language code of a downloadable. This typically indicates a language in which the major part of the module content is written. This attribute shall be omitted or contain an empty string for downloadables that are language-neutral, e.g. reading plans, cross references.
downloads[i].aln	Android-specific language code of articles text in a downloadable. This is an optional alternative language group for a downloadable, typically used for dictionaries that need to be shown in two

	language groups.
downloads[i].reg	An optional region code of a module. This is an artificial entity for logical grouping of modules written in "small languages", e.g. languages of tribes living in Brazil.
downloads[i].des	Downloadable description, typically in a language matching the Ing attribute value.
downloads[i].lds	Optional array of localized descriptions - for language-neutral modules like reading plans or cross references.
downloads[i].lds[j].Ing	Module description language
downloads[i].lds[j].des	Module description in the specified language
downloads[i].inf	Module detailed information. Can use HTML tags for formatting.
downloads[i].fil	Module file name, or an initial part of file names in case if several modules with the same abbreviation are packed into a single zip. For a single module, this attribute may or may not include the standard suffix ".SQLite3". E.g., fil:"RST+.SQLite3" and fil:"RST+" are both valid, and "Strong.dictionary.SQLite3" and "Strong.dictionary" are both valid. The important moment is that the content of this attribute allows MyBible to define a module type by the file name's ending part, e.g. .dictionary, .plan. For several modules within a single zip, this attribute shall simply contain a (common) abbreviation of these modules, e.g. "NRT".
downloads[i].upd	Last module update date, in the format YYYY-MM-DD, e.g. "2016-12-21".
downloads[i].cmt	Module update comments, for one or several last updates.
downloads[i].def	Optional indication of a default downloadable, true or false (a default value is false). E.g: def: true. In conjunction with the Ing attribute, this attribute defines which modules MyBible shall download automatically upon the first start; the Ing here is compared to the device's system language.
downloads[i].url	List of URLs where a downloadable can be taken from. This can be a full URL, e.g.: url: "https://drive.google.com/uc?export=download&id=2F8eF1WNEk". Or, this can be a reference to one of the hosts attributes, in the following format: "{host alias}<file id>", e.g.: "url": "{gdrv}2F8eF1WNEk"
downloads[i].siz	Downloadable size (for download progress indication), in bytes,

	kilobytes (suffix "k" or "K"), megabytes (suffix "m" or "M"), or gigabytes (suffix "g" or "G"), e.g.: "siz": "65700", "siz": "430k", "siz": "12.32M", "siz": "0.05G".
downloads[i].lst	A listing of relative paths of files within this downloadable. Mandatory, if the downloadable contains not only modules but also additional files, like themes, fonts, etc. File paths shall be separated by the " " character. Example: .SQLite3 commentaries.SQLite3 user/themes/Hebrew enlarged.theme.json user/fonts/Hebraice.ttf
downloads[i].dep	A listing of module abbreviations this module depends on (dependencies). Module abbreviations are separated by the " " character. Typically dependencies are bundles. Example: FiraSans HelveticaNeueCyr
downloads[i].hid	Optional indication of a hidden module, true or false (a default value is false). A module with hid:true will not be shown to the users among available downloads.
downloads[i].lic	Name and contact information of a person or organization who has requested the module removal. This field is being processed only if hid = true. If a text in this field starts with an asterisk (*), it means that this module can potentially violate someone's copyright. In this case MyBible will show a special message indicating a potential violation, and the actual text of this field that follows the asterisk will not be shown.
messages	Optional array of information/action messages to be shown to the user by MyBible.
messages[i].id	Unique message ID; it is recommended to base it on the origin date and order number within that date, e.g. "2016-12-24-1". Must be specified.
messages[i].date	Message origin date, in the format YYYY-MM-DD, e.g.: "date": "2016-12-24". Must be specified.
messages[i].type	Message type: one of the following predefined types: "info", "warning", "critical". Must be specified.
messages[i].text	Array of message texts in different languages, must have at least one element.
messages[i].text[j].	Message language code. An empty or missing value means that

Ing	the message is applicable to any language.
messages[i].text[j].txt	Message text. Must be specified, cannot be empty, may contain line breaks in the natural form.
messages[i].text[j].ok	Confirm button caption. Must be specified, cannot be empty.
messages[i].text[j].cancel	Cancel button caption. If omitted or empty, the second (cancel) button will not be shown.
messages[i].localization	A list of MyBible localization languages for which the message will be displayed. If omitted, there is no limitation on the localization languages.
messages[i].os_name	"Android" or "iOS". If omitted, applicable to both platforms.
messages[i].os_version_from	Operating system version the message is applicable from (inclusive). Optional.
messages[i].os_version_to	Operating system version the message is applicable to (inclusive). Optional.
messages[i].app_version_from	Version of the app, for the corresponding operating system, the message is applicable from (inclusive). A string like "5.2.1". Optional.
messages[i].app_version_to	Version of the app, for the corresponding operating system, the message is applicable to (inclusive). A string like "5.0.2". Optional.
messages[i].display_interval	Minimal interval between two messages to prevent displaying them too often, in hours (suffix "h" or "H") or in days (suffix "d" or "D"). Examples: "4h", "2d". Optional; if omitted, a default value is "1d".
messages[i].display_until	Date after which the message is invalid, in the format "YYYY-MM-DD". Optional.
messages[i].display_count	Maximum number of times the message can be shown to the user. If omitted or zero, the number of times is not limited.
messages[i].display_condition	An expression to be checked to define whether the message must be shown.
messages[i].display_condition_value	A value for display_condition for which the message must be shown.
messages[i].action	Name of a predefined action to be executed in case if the user taps the confirm button (see the subsection below for predefined

	actions). If empty, the "OK" button simply dismisses the message, causing no other action.
messages[i].params	Array of action parameters, whether it is required or not depends on the action.
messages[i].params[j].name	Action parameter name.
messages[i].params[j].value	Action parameter value.
registries	Optional array of descriptors on how to download the Registry.
registries[i].url	URL for downloading the Registry file.
registries[i].info_url	URL for downloading the Registry Info File.
registries[i].test	Indication of a test instance of the Registry: true: test instance, false or omitted - production Registry.
registries[i].priority	Registry downloading priority, 1 (try these first), or 2 (try these after trying all with priority 1).
communications	Optional array of descriptors on how to communicate problems to the MyBible team.
communications[i].category	Predefined communication category, one of the following: - "CRASH" - "MODULE" - "SUPPORT"
communications[i].type	Predefined communication type, one of the following: - "E-MAIL"
communications[i].to	Address to send to. Depends on the "type"; for "E-MAIL" - an email address.

Predefined Actions for Messages

Action	Description	Parameter	Description
openWebSite	Open a specifier URL in a browser	url	URL to open

openGooglePlay	Open Google Play	appId	Application ID
openActivity	Open a specified activity, for example Search of Reading Plans	appId	Application ID
		className	Activity full class name (along with the package name).
createEmail	Create an e-mail with a predefined address, text and subject	to	
		subj	
		text	
openSettings	Open MyBible settings	settingId	ID of a setting text

Registry JSON Example

```
{  
  "version": 2850887,  
  "hosts":  
  [  
    {  
      "path": "https://drive.google.com/uc?export=download&id=%s",  
      "alias": "gdrv",  
      "priority": 1,  
      "weight": 100  
    }  
  ],  
  "downloads":  
  [  
    {  
      "abr": "RST+",  
      "lng": "ru",  
      "des": "Русский Синодальный текст, с номерами Странга",  
      "inf": "<h1>Основной русскоязычный перевод</h1>Этот  
перевод...",  
      "fil": "RST+",  
      "upd": "2016-11-01"  
      "cmt": "(2016-01-01) Исправлена опечатка в Пс 18:3",  
      "def": true,  
      "url":  
      [  
        "https://dl.dropbox.com/s/yuyogh7s879xygc/RST%2B.zip",  
        "{gdrive}2dafresfgg"  
      ],  
      "siz": "4.3M",  
    },  
    {  
      "abr": "OBX",  
      "lng": "",  
      "des": "Cross references from OpenBible project",  
      "lds":  
      [  
        {  
          "lng": "ru",  
          "des": "Перекрестные ссылки из проекта OpenBible"  
        },  
      ]  
    }  
  ]  
}
```

```
{
    "lng": "en",
    "des": "Cross references from OpenBible project"
}
],
"fil": "OBX.crossreferences",
"upd": "2016-09-26",
"cmt": "(2016-09-29) Удален дубликат ссылки от Пс 18:3",
"def": true,
"url":
[
    "https://dl.dropbox.com/s/uj0906w3q/OBX.crossreferences.zip",
    "{gdrv}4fjjlat6wddgh"
],
"siz": "2.67M",
},
...
],
"messages":
[
{
    "id": "2016-12-31-1",
    "date": "2016-12-31",
    "type": "info",
    "text":
    [
        {
            "lng": "ru",
            "txt": "Дорогие братья и сёстры!
Мы выпустили новую бета-версию MyBible 4.6.0.
Желающие принять участие в тестировании могут скачать её на сайте
http://mybible.zone,
            "ok": "Конечно, хочу!",
            "cancel": "Нет, спасибо"
        },
        {
            "lng": "",
            "txt": "Dear Brothers and Sisters...",
            "ok": "Yes",
            "cancel": "No"
        }
    ],
    "os_name": "Android",
}
```

```
"app_version_from": 151,
"app_version_to": 159,
"expiration": "2017-01-31",
"max_count": 1,
"action": "gotoWebSite",
"params":
[
    {
        "name": "url",
        "value": "http://mybible.zone"
    },
    {
        "name": "login",
        "value": "guest"
    },
    {
        "name": "passwd",
        "value": "Passw0rd"
    }
],
{
    "id": "2016-12-31-2",
    "date": "2016-12-31",
    "type": "warning",
    "text":
    [
        {
            "lng": "ru",
            "txt": "Друзья!
Могут наблюдаться проблемы при скачивании модулей...",
            "ok": "Понятно"
        },
        {
            "lng": "",
            "txt": "Dear Brothers and Sisters...",
            "ok": "OK"
        }
    ],
    "display_until": "2017-01-02",
    "display_count": 5
},
```

```
"id": "2016-12-31-003",
"date": "2016-12-31",
"type": "critical",
"text":
[
{
    "lng": "ru",
    "txt": "Ваша версия устарела и больше не поддерживается.  
Скачать новую версию Вы можете на Google Play.",
    "ok": "Открыть на Google Play",
    "cancel": "Мне все равно"
},
{
    "lng": "en",
    "txt": "Dear Brothers and Sisters...",
    "ok": "Open at Google Play",
    "cancel": "I don't care"
}
],
"os_name": "Android",
"app_version_to": "158",
"action": "openGooglePlay",
"params":
[
{
    "name": "appId",
    "value": "ua.mybible"
}
]
},
{
    "id": "2018-01-15-001",
    "date": "2018-01-15",
    "type": "info",
    "text":
    [
{
    "lng": "ru",
    "txt": "В окне Библии теперь можно задействовать аппаратное  
ускорение, что сделает прокрутку текста Библии и текста выноски более  
плавной."
}
]
```

На некоторых устройствах аппаратное ускорение причиняет недорисовку текста. Кроме того, при аппаратном ускорении не работают стили линий подчеркивания (все линии – сплошные). Тем не менее, предлагаем Вам включить и попробовать аппаратное ускорение",

```
    "ok": "Показать настройку",
    "cancel": "Нет, спасибо"
},
{
    "lng": "en",
    "txt": "Hardware acceleration can now be used in the Bible window, which makes scrolling of the Bible text and a balloon text more smooth.
```

On some devices hardware acceleration causes incomplete rendering of the Bible text. Besides, with the hardware acceleration turned on the Bible text underline patterns do not work – all the underlines are solid lines. Nevertheless, we suggest you to turn on and try the hardware acceleration.",

```
    "ok": "Show setting",
    "cancel": "No, thanks"
}
],
"os_name": "Android",
"app_version_from": "4.7.0",
"display_count": 2,
"display_condition": "isBibleWindowHardwareAccelerated",
"display_condition_value": "false",
"action": "openSettings",
"params":
[
    {
        "name": "settingId",
        "value": "check_box_bible_window_hardware_acceleration"
    }
]
}
],
"registries":
[
{
    "url": "http://mybible.zone/DL/bibles/registry.zip",
    "info_url": "http://mybible.zone/DL/bibles/registry\_info.zip",
    "test": true,
```

```
        "priority": 1
    },
    ...
],
"communications":
[
{
    "category": "CRASH",
    "type": "E-MAIL",
    "to": "mybibledev@gmail.com"
},
{
    "category": "MODULE",
    "type": "E-MAIL",
    "to": "v@ph4.org",
    "cc": "mybibledev@gmail.com"
}
]
}
```

Registry Info File

The Registry Info File is a small file that helps a MyBible instance define whether the Registry has been updated without downloading the registry itself.

The Registry itself points to locations where the Registry Info File can be downloaded with the "info" element.

The Registry Info File is usually named `registry_info.json`.

The structure of the Registry Info File is the following:

```
{  
  "version": <version identification integer>  
}
```

Where the "version" element has exactly the same meaning as the same element in the Registry itself.

An example of the Registry Info File:

```
{  
  "version": 2850887  
}
```