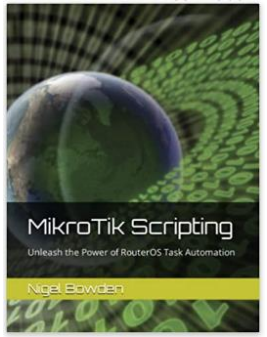
https://MikroTikScripting.com



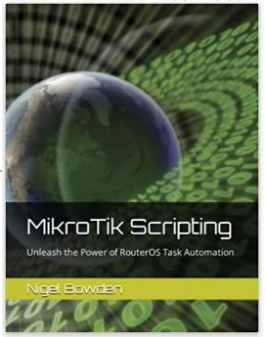
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LESSON 6- TELEGRAM REPORTER

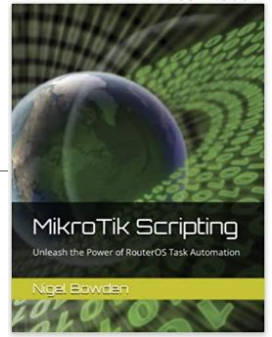
Topics

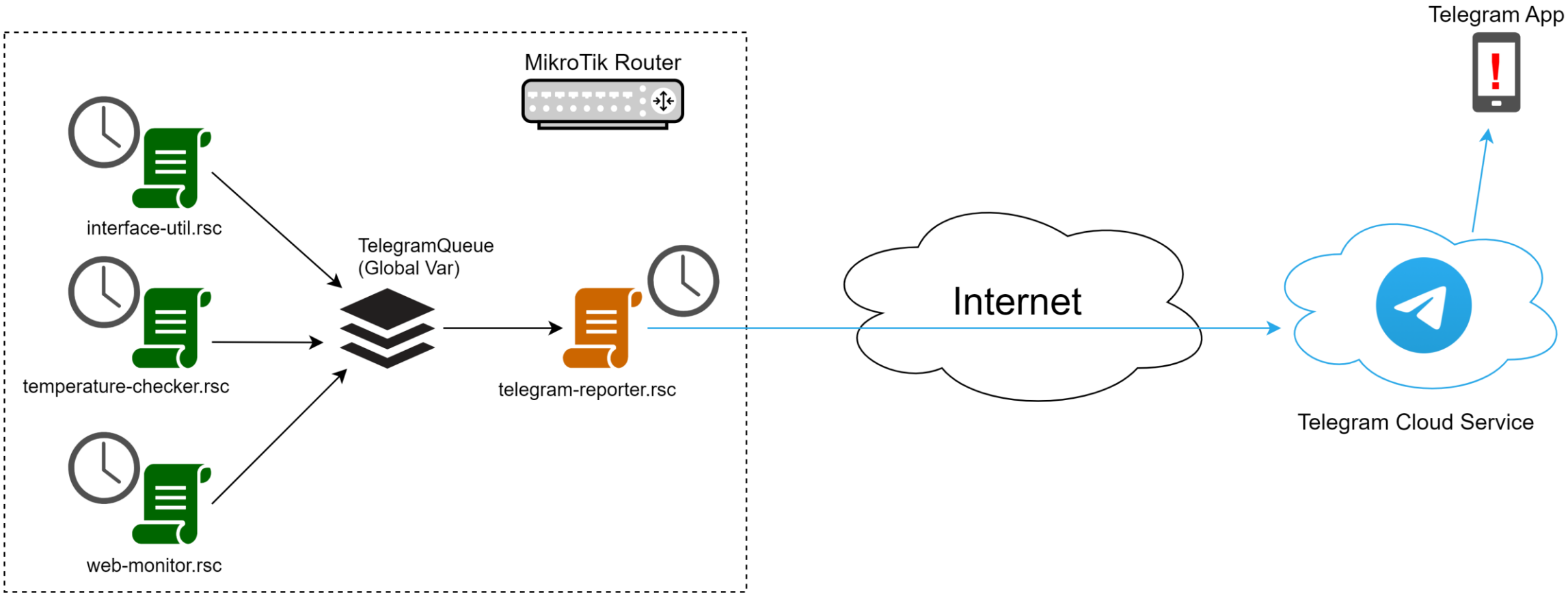


In this lesson:

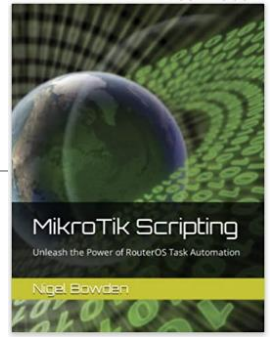
- Review solution overview
- Overview of script requirements
- Code creation
- Code testing

Solution Overview





Development Workflow



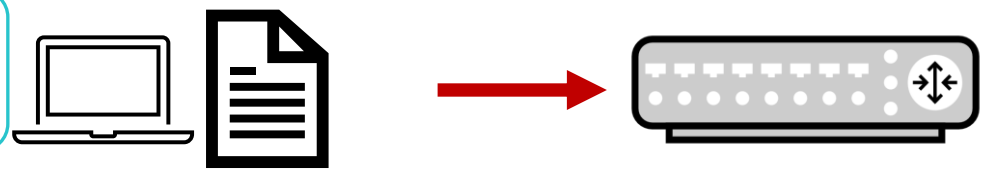
Create

- Create a script on your development machine (e.g. laptop)



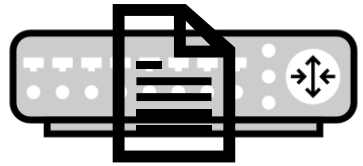
Deploy

- Move the script to your MikroTik device



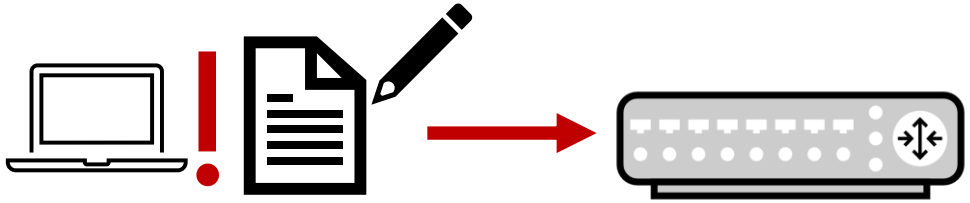
Test

- Execute the script to verify it behaves as expected

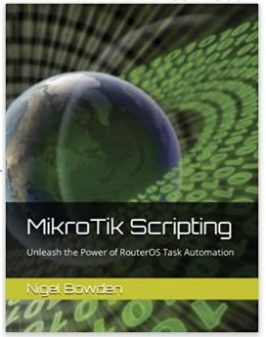


Debug

- If there are issues with the script, debug them and repeat this workflow until all issues are resolved

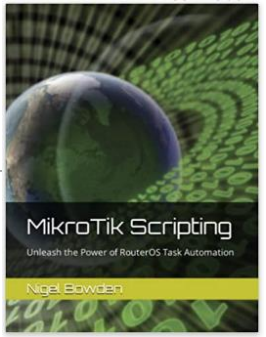


Script Requirements



- What should this script do?
  - Check we have a Chat ID for our bot (retrieve one if not)
  - Process each entry in the TelegramQueue array & any alert messages found to Telegram
  - Run from scheduler
- Pre-requisites:
  - Created a bot on Telegram
  - Have obtained the bot API token
- Data source:
  - TelegramQueue array populated by probe scripts
    - Execution:
  - MikroTik Scheduler: `/import telegram-reporter.rsc`

Telegram API Reference



API reference document: https://core.telegram.org/bots/api

Making requests

All queries to the Telegram Bot API must be served over HTTPS and need to be presented in this form: `https://api.telegram.org/bot<token>/METHOD_NAME`. Like this for example:

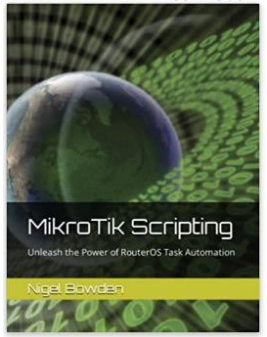
```
https://api.telegram.org/bot123456:ABC-DEF1234ghIkl-zyx57W2v1u123ew11/getMe
```

Getting updates

There are two mutually exclusive ways of receiving updates for your bot – the getUpdates method on one hand and webhooks on the other. Incoming updates are stored on the server until the bot receives them either way, but they will not be kept longer than 24 hours.

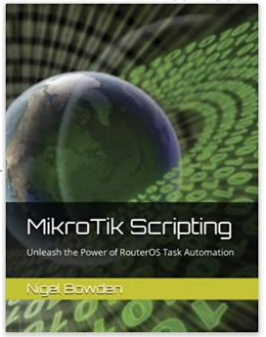
Regardless of which option you choose, you will receive JSON-serialized Update objects as a result.


```
{"ok":true,"result":[{"update_id":760529558,
"message":{"message_id":191,"from":{"id":1385602616,"is_bot":false,"first_name":"Nigel",
"last_name":"Bowden","username":"wifinigel","language_code":"en"},"chat":{"id":1385602616,
"first_name":"Nigel","last_name":"Bowden","username":"wifinigel","type":"private"},
"date":1682011744,"text":"test"}}]}
```


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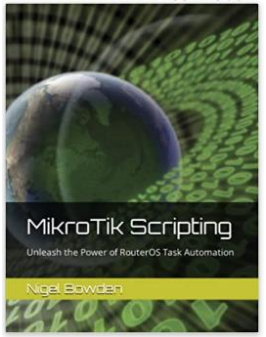
Coding Demo

Summary Notes



- Script created: telegram-reporter.rsc
- Testing:
  - Verify API key works
  - Verify we have derived a Chat ID
  - Verify we can manually create a message and it reports to Telegram bot
  - Verify each probe's alerts are received and processed by the script and are seen in the bot
- Deployment:
  - Stored on file system of MikroTik device
  - Runs from scheduler
- Code available: MikroTikScripting.com

https://MikroTikScripting.com



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Lesson Complete

LESSON 6- TELEGRAM REPORTER