Zabbix agent 2 troubleshooting approaches

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Agenda

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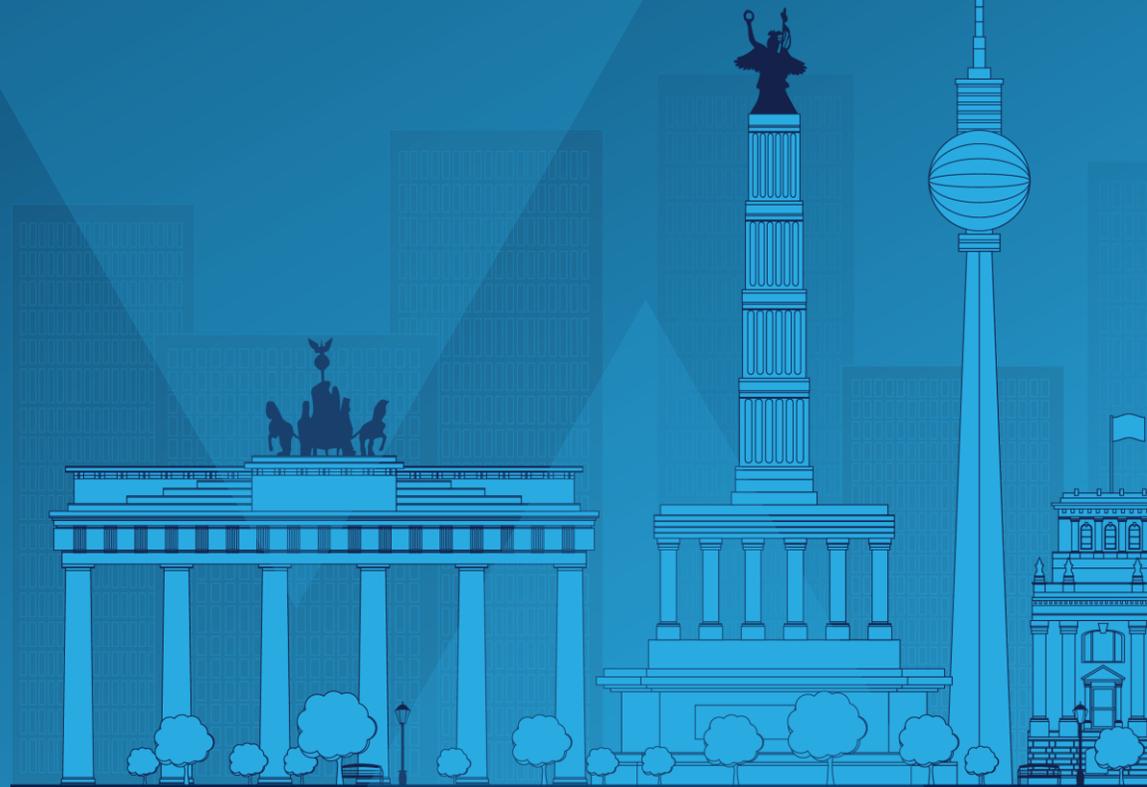
Zabbix agent 2

- Setting up Zabbix agent 2
- Working with an existing Zabbix agent 2

Zabbix agent 2 loadable plugins

- What they are and how they function

Real-life problems and solutions

- Troubleshooting an existing plugin
- Working with your own plugin

A bit of an intro

Zabbix agent 2

- What is it?

- How can we set it up?

- Built-in Plugins!

- Loadable Plugins?

Technical but not too technical

- Configuration

- Execution

- Unix-based

- Coding in examples

Zabbix agent 2

Installation and common issues

- The process explains the problem

- Setting up from packages

- Agent 2 version requirements

- Plugin setup

- Other common issues
  - ✓ Connection problems
  - ✓ Permission and firewalls
  - ✓ Resource limitations
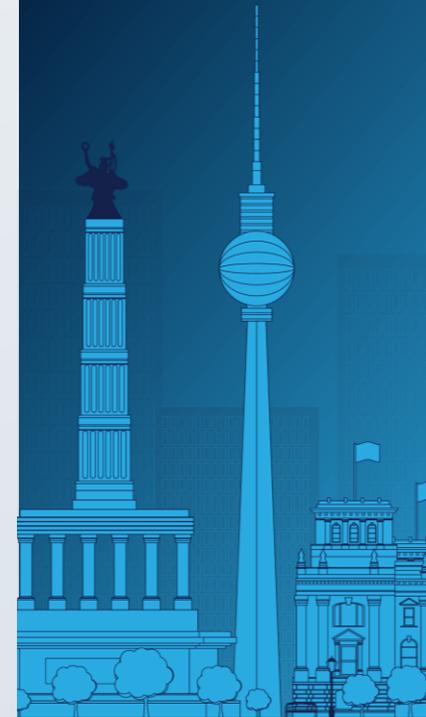
Zabbix agent 2 plugins

Configuration

- Separate files

- Included

Key elements

- Loaded in only with 6.0 LTS

- Compiled or installed

- Officially native with GO

Plugin compatibility

Zabbix agent 2

Zabbix agent 2 Plugin

v6.0

v6.4

v7.0
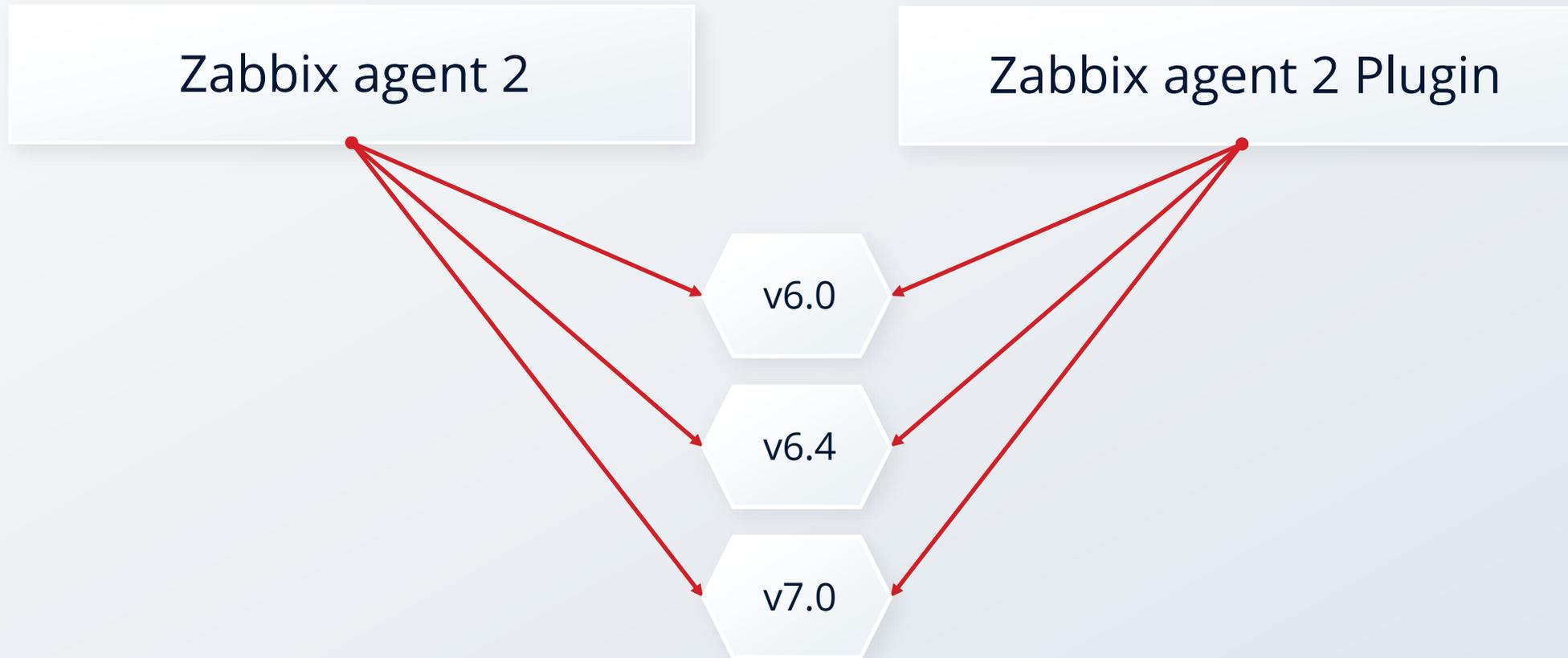
Examples

Problem

- Zabbix agent 2 MongoDB plugin
- Zabbix agent 2 is built from packages
- Zabbix agent 2 is run from command line
- Added plugin binary path in custom configuration file
- Cannot access MongoDB metrics from Zabbix server

Examples

Solution

- Check Zabbix agent 2 startup log file
  - ✓ It contains all the information about available plugins

- MongoDB plugin is missing

- Check configuration file for plugin
  - ✓ MongoDB binary is set in path variable

- Check Zabbix agent 2 configuration file for plugin
  - ✓ MongoDB configuration file is added via included parameter

- Is Zabbix agent 2 executable launched with the correct configuration file?
  - ✓ Notice –c flag and instead uses default configuration

Examples

Zabbix agent 2 and plugin configuration

```
Plugins.MongoDB.System.Path=/path/to/mongodb.exe
```

```
Include=./zabbix_agent2.d/plugins.d/*.conf
```

```
Include=./path/to/plugin/mongodb.conf
```

Zabbix execution with custom configuration

```
./path/to/zabbix_agent2 -c
/path/to/zabbix/custom/conf/zabbix_agent2.conf
```

Examples

Problem

- Zabbix agent 2 custom plugin

- Plugin compiles successfully

- Set up configuration

- Zabbix agent 2 is started
  - ✓ Plugin is in log list

- One metric key is not working

Examples

Solution

- Check Zabbix agent 2 startup log file
  - ✓ It contains the required plugin

- Increase log debug level to 5

- Restart Zabbix agent 2
  - ✓ Test the missing metric with –t or zabbix_get
  - ✓ Still missing

- Check source code if the required metric is registered

Examples

Zabbix agent 2 log

```
using plugin 'MongoDB' (/path/to/plugin/zabbix-agent2-plugin-
mongodb) providing following interfaces: exporter, runner,
configurator
```

Zabbix agent 2 log level

```
DebugLevel=5
```

Zabbix get

```
./path/to/zabbix_get -s 127.0.0.1 -p 10050 -k custom.plugin.key
```

Examples

Problem

- Upgrade Zabbix agent 2 to another major version
- A plugin stops working

Examples

Solution

- **Check Zabbix agent 2 startup log file**
  - ✓ It does not contain the required plugin

- **Check Zabbix documentation and release notes**
  - ✓ Previously integrated plugins are automatically included only in current LTS

- **Find the required loadable plugin**
  - ✓ Add it to Zabbix agent 2

- **Check metric**

Best practices

Regular updates

- Keep Zabbix agent 2 up to date on the current version
- Get informed about changes before major updates

Documentation and process review

- Keep up to date with coding and implementation best practices

Conclusion

Key points

- The process explains the problem

- The log file should be your first stop for troubleshooting

- Keep up to date with Zabbix news and changes
  - ✓ Especially when updating major versions

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Thank You!

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