1 memcached.json

memcached.json — memcached configuration file

DESCRIPTION

memcached.json is a JSON encoded file specifying the properties used to configure the memcached server. Some of the parameters may be changed at runtime by instructing memcached to reread the configuration file. These properties is explicitly marked as such.

The following sections describes the various attributes that may be specified.

admin

Specify the username used for administrive operations (like bucket management). To disable the use of an administrative role you should set this to an empty string.

threads

The **threads** attribute specify the number of threads used to serve clients. By default this number is set to 75% of the number of cores available on the system (but no less than 4). The value for threads should be specified as an integral number.

interfaces

The **interfaces** attribute is used to specify an array of interfaces memcached should listen at. Each entry in the interfaces array is an object describing a single interface with the following properties:

```
host          A string value specifying the hostname to bind to.
              If the attribute is missing (or set to "*")
              IN_ADDR_ANY is used.

port          An integral number specifying the port number

IPv4          A boolean value specifying if IPv4 should be enabled
              or not. By default IPv4 is enabled.

IPv6          A boolean value specifying if IPv6 should be enabled
              or not. By default IPv6 is enabled.

maxconn       An integral number specifying the maximum number of
              concurrent clients that may be connected.

backlog       An integral number specifying the backlog size
              set to listen.

tcp_nodelay   A boolean value if TCP_NODELAY should be set or not.
              By default tcp_nodelay is enabled.

ssl           An object specifying SSL related properties.
              See below.
```

The **ssl** object contains the two **mandatory** attributes:

```
key           A string value with the absolute path to the
              file containing the private key to use.

cert          A string value with the absolute path to the
              file containing the X.509 certificate to use.
```

maxconn, **backlog**, **tcp_nodelay**, **ssl.key** and **ssl.cert** may be modified by instructing memcached to reread the configuration file.

extensions

The **extensions** attribute is used to specify an array of extensions which should be loaded. Each entry in the extensions array is an object describing a single extension with the following attributes:

```
module    A string value containing the module to load. This may
          either be an absolute path, or the systems library path
          will be searched for the object. When loaded memcached
          calls the method memcached_extensions_initialize().

config    A string value containing configuration attributes to
          the module. The config value is passed transparently
          to the module.
```

engine

The **engine** attribute is used to specify the engine to load. It is an object with the following attributes:

```
module    A string value containing the module to load. This may
          either be an absolute path, or the systems library path
          will be searched for the object. The object must
          implement the engine api.

config    A string value containing configuration attributes to
          the module. The config value is passed transparently
          to the module.
```

require_sasl

The **require_sasl** attribute specify if performing SASL authentication is required or not. The value is a boolean value which is set to false by default.

prefix_delimiter

The **prefix_delimiter** attribute is used to specify the delimiter character used for detailed statistics. By default it is set to *:*. The value is specified as a string value, but must not exceed 1 character in length. This parameter is part of the inheritage from memcached and should not be used unless you know what you're doing.

allow_detailed

The **allow_detailed** attribute is used to control the accessibility of the stats detailed command. By default it is set to true. This parameter is part of the inheritage from memcached and should not be used unless you know what you're doing.

detail_enabled

The **detail_enabled** attribute is used to control if detailed stats is collected. By default it is set to false. This parameter is part of the inheritage from memcached and should not be used unless you know what you're doing.

reqs_per_event

The **reqs_per_event** attribute is an integral value specifying the number of request that may be served per client before serving the next client (to avoid starvation). The default value is 20.

reqs_per_event may be updated by instructing memcached to reread the configuration file.

verbosity

The **verbosity** attribute is an integral value specifying the amount of output produced by the memcached server. By default this value is set to 0 resulting in only warnings to be emitted. Setting this value too high will produce a lot of output which is most likely meaningless for most people.

verbosity may be updated by instructing memcached to reread the configuration file.

lock_memory

The **lock_memory** attribute is a boolean value used to control if memcached should try to lock memory pages into memory. By default this option is set to false. Failure to lock memory is not treated as a fatal error. Beware that locking memory pages may not necessarily result in a better overall performance. Use with care.

large_memory_pages

The **large_memory_pages** attribute is a boolean value used to enable the request for large memory pages. Using large memory pages may result in a reduction of TLB misses, but it does require the underlying engine to allocate memory in big chunks (see the preallocate attribute for the default_engine). By default this is disabled.

daemonize

The **daemonize** attribute is a boolean value used to specify if memcached should be started as a daemon or not (detach from the tty) on platform which support this. By default this value is set to false.

pid_file

The **pid_file** attribute is a string value specifying a file to store the process id. By default this value is not specified.

datatype_support

The **datatype_support** attribute is a boolean value to enable the support for using the datatype extension. By default this support is **disabled**.

EXAMPLES

A Sample memcached.json:

```
{
    "threads" : 4,
    "interfaces" :
    [
        {
            "maxconn" : 1000,
            "port" : 11310,
            "backlog" : 1024,
            "host" : "*",
            "IPv4" : true,
            "IPv6" : true,
            "tcp_nodelay" : true,
            "ssl" :
            {
                "key" : "/etc/memcached/pkey",
                "cert" : "/etc/memcached/cert"
            }
        },
        {
            "maxconn" : 10000,
            "port" : 11210,
            "backlog" : 1024,
            "host" : "*",
            "IPv4" : true,
            "IPv6" : true,
            "tcp_nodelay" : true
        },
        {
            "maxconn" : 1000,
            "port" : 11213,
            "host" : "127.0.0.1",
            "IPv6" : false
        }
    ],
    "extensions" :
    [
        {
            "module" : "stdin_term_handler.so",
            "config" : ""
        },
        {
            "module" : "file_logger.so",
            "config" : "cyclesize=10485760;sleeptime=19;filename=data/n_0/logs/ ↩
               memcached.log"
        }
    ],
    "engine" : {
        "module" : "bucket_engine.so",
        "config" : "admin=_admin;default_bucket_name=default;auto_create=false"
    },
    "require_sasl" : false,
    "prefix_delimiter" : ":",
    "allow_detailed" : true,
```

```
    "detail_enabled" : false,
    "reqs_per_event" : 20,
    "verbosity" : 0,
    "lock_memory" : false,
    "large_memory_pages" : false,
    "daemonize" : false,
    "pid_file" : "/var/run/memcached.pid",
    "datatype_support" : true
}
```

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