# 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.

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

### 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.

#### 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.

#### 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.

### 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.

### **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"
}
```

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