Introduction in Scalarizr API

Concepts

- Plain objects
- JsonRPC
- HTTP transport

Plain Objects

```
class SysInfo(object):

    @rpc.service_method
    def load_average(self):
        return os.getloadavg()

server = JsonRPCServer({'sysinfo': SysInfo()})
server.serve_forever()
```

JsonRPC

Simple Request / Response protocol

Request:
{'params': {'bar': 42}, 'method': 'foo', 'id': 1336479051.099472}

Response:
{'result': 42, 'id': 1336479051.099472}

Error:
{'error': {'data': 'Something error in network', 'code': -32605}, 'id': 1336479051.099472

HTTP transport

POST http://domain/jsonrpc-service/<module-name>

request as raw POST data

module A => Python object Abricos
module B => Python object Bananas
module C => Python object Melon

Security:
- Server-id and Timestamp header
- Encrypted and singed raw POST data

Already implemented APIs

- SysInfo
- HAProxy

SysInfo

SNMP replacement!

- fqdn get/set
- block_devices
- uname
- dist
- cpu_info
- load_average
- disk_stats
- net_stats

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Request:
{"params": {"bar": 42}, "method": "foo", "id": 1336479051.099472}

Response:
{"result": 42, "id": 1336479051.099472}

Error:
{"error": {"data": "Something error in netware", "code": -32603}, "id": 1336479051.099472}

HTTP transport

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request as raw POST data

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