

# Large Scale XMPP

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# About me and us

- Me:
  - Co-Founder of Flosoft.biz
  - Chief Technical Officer
  - XMPP User since 2003
- Us:
  - CEK Media founded in 2000
  - Flosoft.biz founded in 2004
  - Offering XMPP Services since early 2005
  - Specialize in Managed Hosting

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# General Rules for Administrators

- Make sure your job is done for you
- Automate everything
- Setup & laziness

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# Choosing the Server

- Are components used? Which?
- How many users / load?
- Availability requirement?

# Ejabberd

- Easy install / upgrades
- Integrated DB
- Clustering Support
- Integrated MUC
- Very stable
- Impossible to debug

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# Openfire

- Easy install / upgrades
- Webinterface
- All Transports integrated
- Not scalable at all
- No clustering in the OpenSource version

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# Tigase

- Scalable
- Great Clustering
- Relatively easy to debug
- MUC / PEP / PubSub components
- On the fly configuration (VHOSTs)
- Integration
- Scriptable

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# the Hardware

- A few questions to determine:
  - Load?
    - Concurrent Connections today / in 12 months
    - What kind of traffic
    - Components?
- RAID

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# Monitoring

Datacenter: RBX-1

Date: 2009-01-20 16:23:02

S11	09A01 09B01 09C04 09D04 09E01 09F01 09G01	09A02 09B02 09C05 09D05 09E02 09F02 09G02	09A03 09B03 09C06 09D06 09E03 09F03 09G03	09A04 09B04 09C07 09D07 09E04 09F04 09G04	09A05 09B05 09C08 09D08 09E05 09F05 09G05	09A06 09B06 09C09 09D09 09E06 09F06 09G06	09B07 09C10 09D10 09E07 09F07 09G07	09B08 09C11 09D11 09E08 09F08 09G08	09B09 09C12 09D12 09E09 09F09 09G09	09B10 09C13 09D13 09E10 09F10 09G10					
11A14 11B14 11C14 11D14	11A13 11B13 11C13 11D13	11A12 11B12 11C12 11D12	11A11 11B11 11C11 11D11	11A10 11B10 11C10 11D10	11A09 11B09 11C09 11D09	11A08 11B08 11C08 11D08	11A07 11B07 11C07 11D07	11A06 11B06 11C06 11D06	11A05 11B05 11C05 11D05	11A04 11B04 11C04 11D04	11A03 11B03 11C03 11D03	11A02 11B02 11C02 11D02	11A01 11B01 11C01 11D01	11B03 11E02 11E01	
S01	01C10 01C09 01C08 01C07 01C06 01C05 01C04 01C03 01C02 01C01	01B10 01B09 01B08 01B07 01B06 01B05 01B04 01B03 01B02 01B01	01A10 01A09 01A08 01A07 01A06 01A05 01A04 01A03 01A02 01A01	02H06 02G06 02F06 02E06 02D05 02C06 02B06 02A06	02H05 02G05 02F05 02E05 02D05 02C05 02B05 02A05	02H04 02G04 02F04 02E04 02D04 02C04 02B04 02A04	02H03 02G03 02F03 02E03 02D03 02C03 02B03	02H02 02G02 02F02 02E02 02D02 02C02 02B02	02H01 02G01 02F01 02E01 02D01 02C01 02B01	03H06 03G06 03F06 03E06 03D06 03C06 03B06 03A06	03H05 03G05 03F05 03E05 03D05 03C05 03B05 03A05	03H04 03G04 03F04 03E04 03D04 03C04 03B04 03A04	03H03 03G03 03F03 03E03 03D03 03C03 03B03 03A03	03H02 03G02 03F02 03E02 03D02 03C02 03B02 03A02	03H01 03G01 03F01 03E01 03D01 03C01 03B01 03A01
S16	16A09 16B07 16C07 16D07 16E07 16F07	16A08 16B06 16C06 16D06 16E06 16F06	16A07 16B05 16C05 16D05 16E05 16F05	16A06 16B04 16C04 16D04 16E04 16F04	16A05 16B03 16C03 16D03 16E03 16F03	17A07 17B07 17C07 17D07 17E07 17F07	17A06 17B06 17C06 17D06 17E06 17F06	17A05 17B05 17C05 17D05 17E05 17F05	17A04 17B04 17C04 17D04 17E04 17F04	17A03 17B03 17C03 17D03 17E03 17F03					
S17	CT102	CT103	CT104												



# Monitoring

- 3 different software servers
- 1 monitoring technique
- XMPP Bot connecting every 60 seconds
- Tigase integrated monitoring for proactive monitoring

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# Redundancy

- Fallback machines / Cluster
- FailOver IPs / Loadbalancing IPs
- Automation

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# Loadbalancing

- Loadbalancers often don't work
- Long lived tcp sessions
- SRV Loadbalancing

# Dynamic Clustering

- Real Hardware
- Pre-configured images
- Load-balancing IPs

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# Some rules

- Cluster only if needed
- Scale as soon as possible (pre-scale)
- Be ready to scale at any time
- Find a single solution to most problems
- Debug later!

Thank You

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