

OSX Leopard Server:

School server, Soup to nuts in 45 minutes

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Goals:

























1. Understand what is new about OSX Leopard Server
2. Determine which of these fits your needs in education
3. Learn what other add-on programs can make this even better
4. See the complete recipe, start to finish

Mac Servers: a brief history

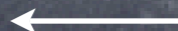
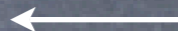
- 👁 AppleShare 1.0—the preCambrian era
- 👁 AppleShare IP (ASIP) 5.0 is still running in some schools
- 👁 OSX server 1.0 (a.k.a. NEXT): routed appletalk, ca. 1999
- 👁 OSX server—the real deal
 - 👁 10.0 Cheetah—use at your own risk
 - 👁 10.1 Puma—much more stable (“Cheetah SP1”)
 - 👁 10.2 Jaguar—stable, improved mail
 - 👁 10.3 Panther—included a VPN server
 - 👁 10.4 Tiger—stable, more network resources, Intel support
 - 👁 10.5 Leopard—RADIUS included, weblogs improved, many more...

Mac OS X Server

Features

-  Setup and Admin 
-  iCal Server 
-  Wiki Server 
-  Podcast Producer 
-  Spotlight Server 
-  iChat Server 
-  File Sharing 
-  Mail Services 
-  Web Hosting 
-  Directory 
-  Client Management 
-  Networking and VPN 

Leopard Server-
Notice anything new?



Something old, something new, something borrowed, something blue:

- 👁️ AFP
- 👁️ FTP
- 👁️ Web-add Rails
- 👁️ QTSS
- 👁️ mySQL
- 👁️ Open Directory
- 👁️ ARD Remote Desktop
- 👁️ iChat server
- 👁️ VPN
- 👁️ Firewall/NAT/DHCP
- 👁️ Webmail
- 👁️ Spam/virus
- 👁️ Xgrid
- 👁️ NTP
- 👁️ swupd
- 👁️ netboot/install
- 👁️ LPR
- 👁️ App servers
- 👁️ Wiki
- 👁️ RSS server
- 👁️ iCal server
- 👁️ Podcast producer
- 👁️ Time Machine server
- 👁️ Weblogs (blojsom)
- 👁️ RADIUS (freeRADIUS)
- 👁️ Windows/SMB
- 👁️ Spotlight Server

Your campus: The Leopard Era

Leopard Server:

- Weblogs and Wikis now truly professional looking
- iChat Server allows for Video Teleconferencing intramural and extramural (mura means wall in latin)
- iCal server: school schedule on laptops, iPhones, any webDAV calendaring device
- Home page streaming: allows streaming of lectures, projects, interviews
- Podcast Producer: allows for real time production of lecture archives from any ichat camera (e.g. laptop)
- Webmail: great access, built-in spam and virus filters
- Software update server: update all local machines from one server
- Web server: supports Ruby and other new protocols
- VPN server: allows safe connection from home/wireless access
- about 20 other cool things you can use to improve how we educate our students
- <http://www.apple.com/server/macosx/features/>

Something for everyone:

Student users:

- Student portfolios in html, shared documents as pdf
- Weblogs (see <http://facstaff.hpa.edu/weblog/bwiecking/>) now improved with attachments, lists, formatting (more on this later)
- AFP for shared folders: Faculty to faculty, student to student, others
- Webmail and Wikis for collaboration
- WebDAV makes collaborative web pages possible (see google apps)
- Podcast producer makes recording and streaming student presentations much easier
- QTSS broadcaster can be used to share student projects
- iCal server for collaboration
- VPN for secure home access

Something for everyone:

👁 Faculty users:

- 👁 Online grades (see gradekeeper: <http://www.gradekeeper.com>) using Sites folders
- 👁 Weblogs (see <http://facstaff.hpa.edu/weblog/bwiecking/>) now improved with attachments, lists, formatting (more on this later)
- 👁 AFP for shared folders: Faculty to faculty, student to student, others
- 👁 Webmail and Wikis for collaboration
- 👁 Spotlight server can now track plagiarism
- 👁 Podcast producer makes recording and streaming lectures, student presentations much easier
- 👁 QTSS broadcaster can be used to share video lessons with students
- 👁 iCal server for collaboration
- 👁 VPN for secure home access

Something for everyone:

Faculty users:

- Online grades (see gradekeeper: <http://www.gradekeeper.com>) using Sites folders
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- Spotlight server can now track plagiarism
- Podcast producer makes recording and streaming lectures, student presentations much easier
- QTSS broadcaster can be used to share video lessons with students
- iCal server for collaboration
- VPN for secure home access
- iChat server for professional development

Something for everyone:

• Staff users:

- School web pages with current information
- Weblogs (see <http://facstaff.hpa.edu/weblog/bwiecking/>) now improved with attachments, lists, formatting (more on this later)
- AFP for shared folders: Faculty to faculty, student to student, others
- Webmail and Wikis for collaboration
- QTSS broadcaster can be used to share admin messages with parents, faculty, students, also training materials
- iCal server for collaboration
- VPN for secure home access

Something for everyone:

👁️ sysadmin users:

- 👁️ Mail server runs Postfix now for increased stability
- 👁️ DNS server as master or slave
- 👁️ LPR server for printer pools, remote printing
- 👁️ iChatAV for collaboration, help desk
- 👁️ RADIUS for central admin of wired and wireless access
- 👁️ MySQL server for SIS
- 👁️ Open Directory for master/clone directory info
- 👁️ NAT/Firewall and DHCP for internal network security
- 👁️ Time Machine server for collected data backup

weblogs

Weblogs: Leopard Server

- Extension of the Blojsom open source weblog system

blog

test 2 November 9, 2007 12:51 PM by
This is placeholder text for your new blog entry. Replace it with your own.
 [0 comments](#)

test November 9, 2007 10:18 AM by
Nice blog. Shows how to
 [About Stacks.pdf](#), [link](#) and make **bold** text.
b
 [0 comments](#)

[Filter by Date](#)
 Choose date...

[Filter by Tag](#)
 hot

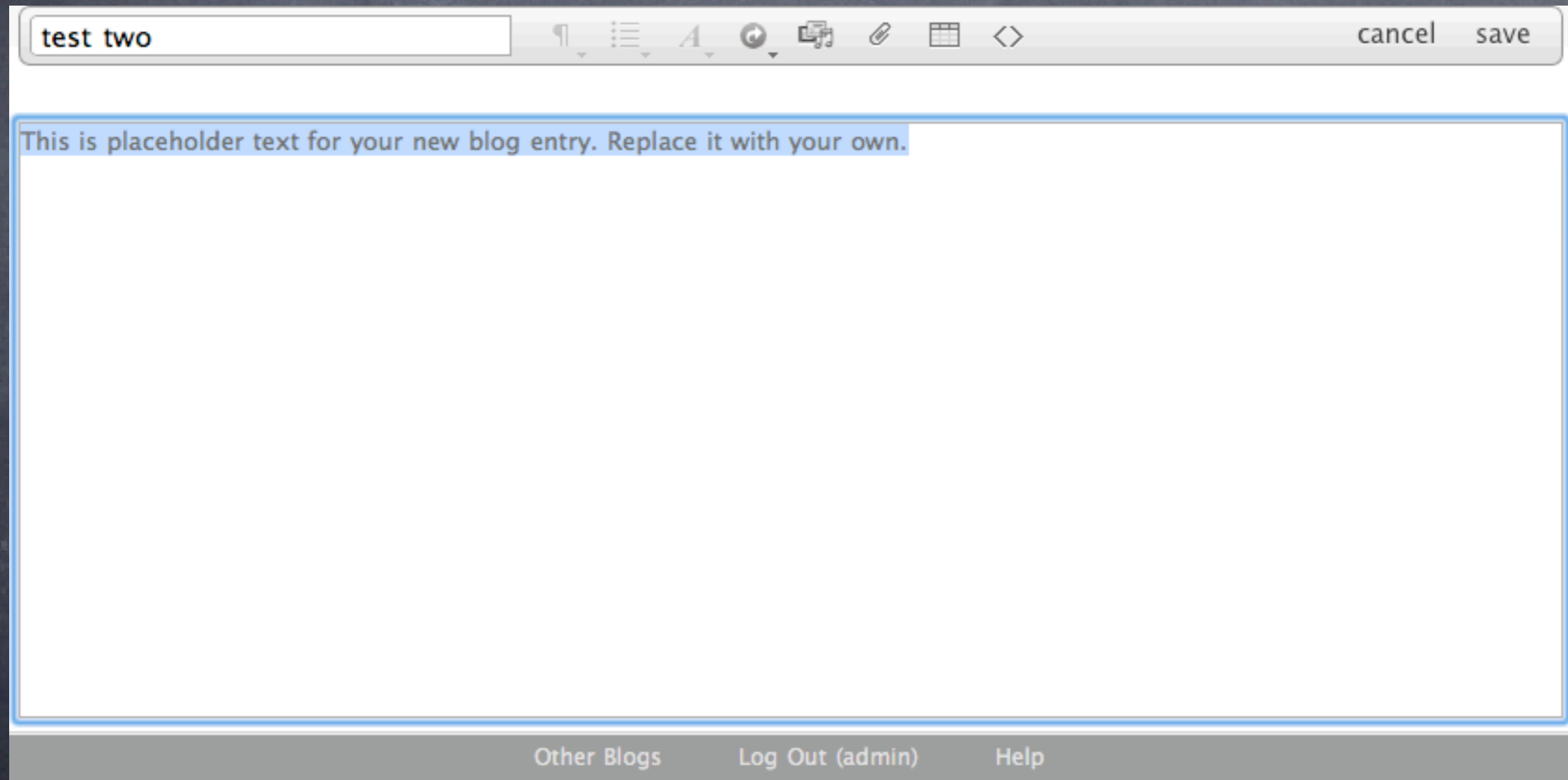
1 - 2 of 2

[Other Blogs](#) [Log In](#) [Help](#)

weblogs

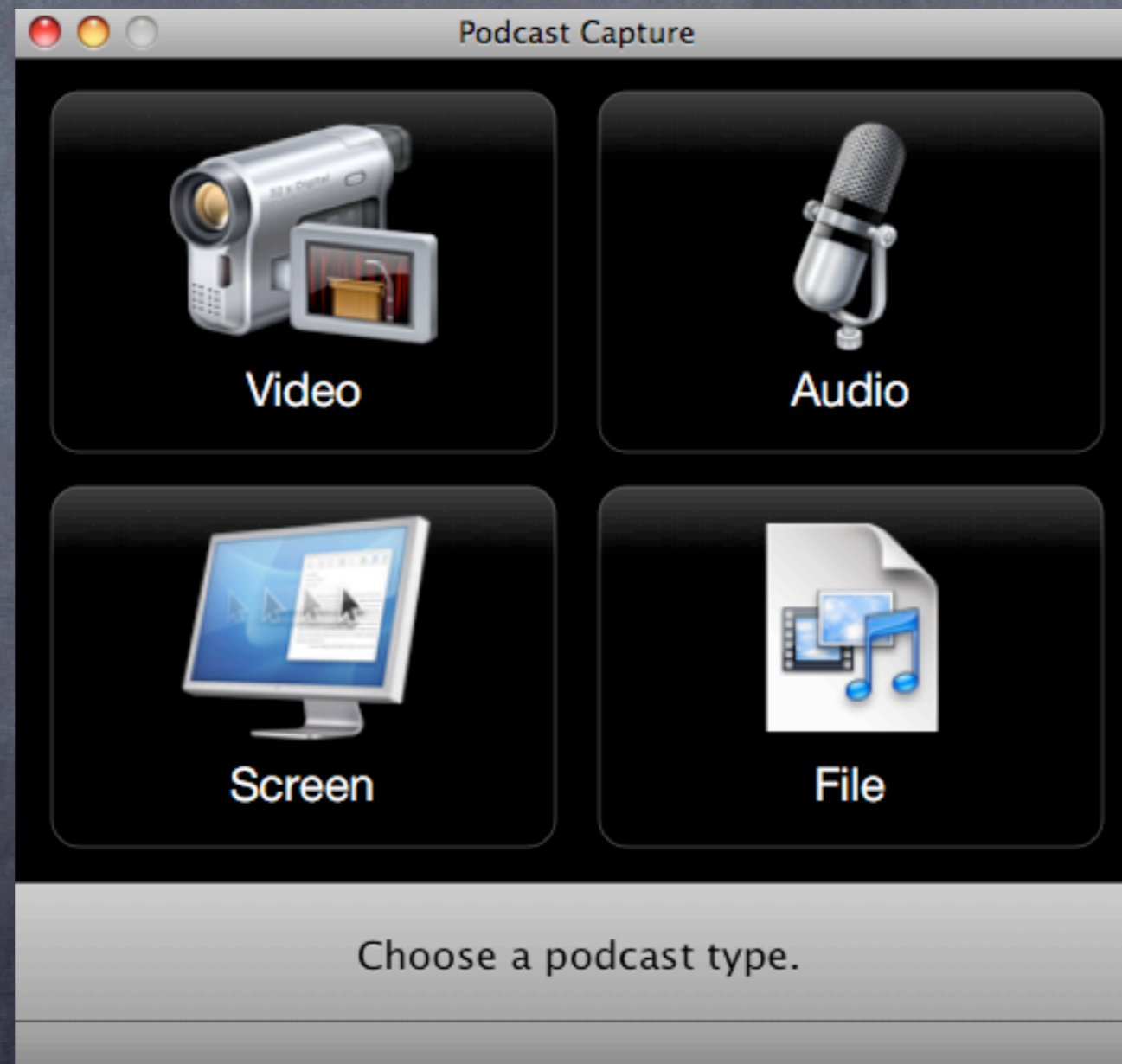
Weblogs: Leopard Server

- Many more options under Leopard: attachments, fonts, media, urls, html view, tables, bullets, outlines.



Podcast Producer

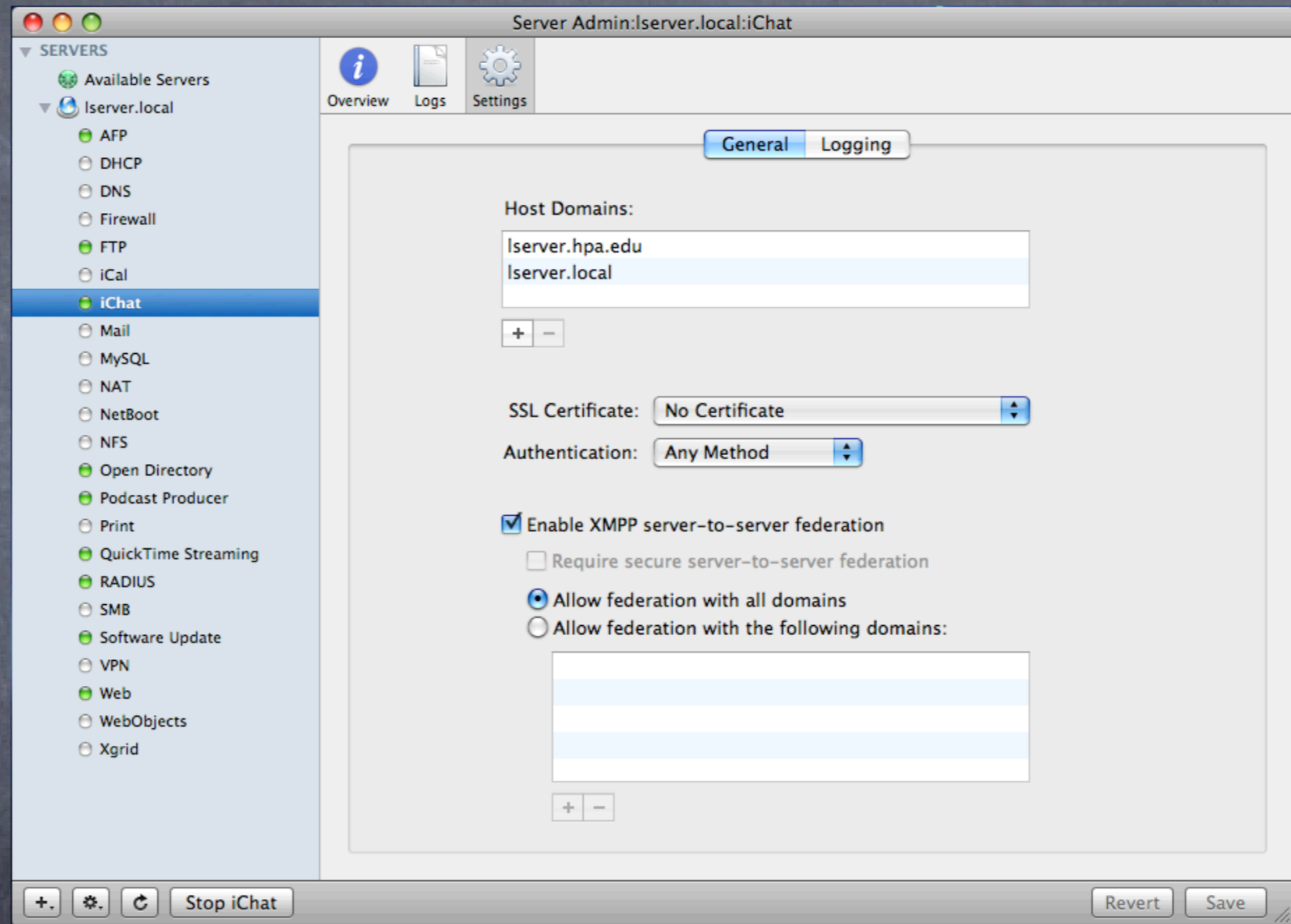
- Can aggregate streams from many computers, using Xgrid to process in realtime for instant access to media streams from the server



iChatAV server

iChatAV jabber server

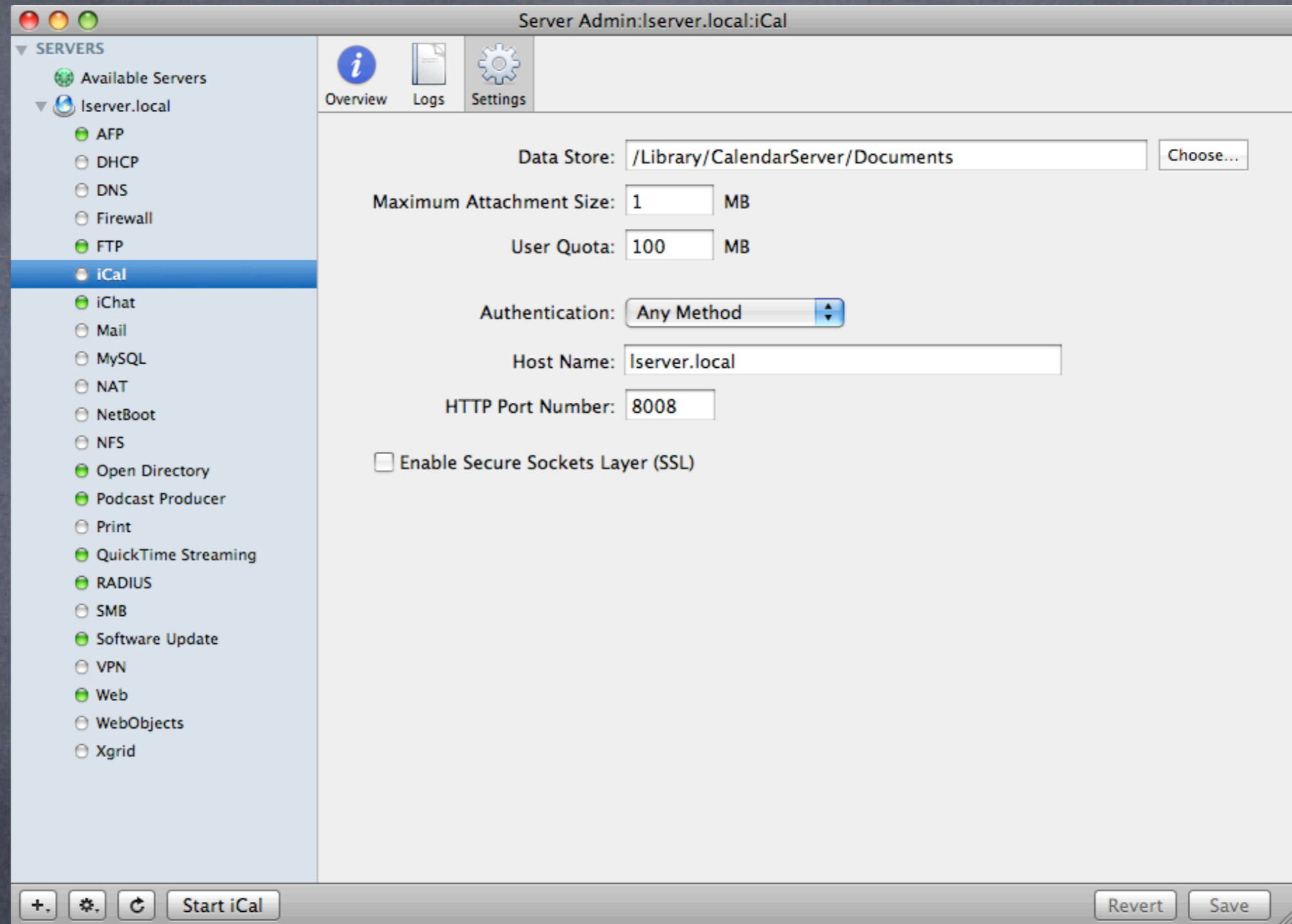
- Hosts jabber users internal and external
- Use VPN for outside clients to share
- Logging utilities can log chats, conferences for future archives



iCal server

iCal Webcal server

- works with any webdav calendaring system
- Format: `webcal://ical.mac.com/hawaiiprep/daily.ics`
- If no Leopard server, this can be done on any webDAV server (see Tenon documents)



Webmail

Webmail: Leopard Server

- ⦿ Needed some config under Tiger (see Schoun Regan's excellent book on this: Mac OSX Server Essentials)
- ⦿ Config is simple under Leopard server
- ⦿ Many plugins/addons are available

Folders
Last Refresh:
Sun, 1:37 pm
(Check mail)

[Inbox](#)
[Deleted Messages](#)
[Drafts](#)
[Sent Messages](#)

mail/

Current Folder: **INBOX** [Sign Out](#)

[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Calendar](#)

Mac OS X Server WebMail

[Previous](#) | [Next](#) | [1](#) [2](#) [3](#) [4](#) [5](#) | [Show All](#) | [Toggle All](#) Viewing Messages: 1 to 15 (67 total)

Move Selected To: Transform Selected Messages:

<input type="checkbox"/>	From	Date	Subject
<input type="checkbox"/>	Circuit City	Sat, 11:29 pm	Coupon inside--shop now, turkey makes you sleepy
<input type="checkbox"/>	BananaRepublic.com	Sat, 11:06 pm	Get free shipping and free returns at Piperlime.
<input type="checkbox"/>	suspndedreality@optonline.net	Sat, 8:31 pm	*****HELLO*****
<input type="checkbox"/>	streaming-server-users-request@lists.apple.com	Sat, 10:09 am	Streaming-server-users Digest, Vol 4, Issue 369
<input type="checkbox"/>	Amazon.com	Sat, 12:27 am	Your Amazon.com order 002-1619636-7267415 has ship...
<input type="checkbox"/>	Maris Ho	Fri, 3:46 pm	Re: Employee Handbook & Conflict of Interest Disclosure ...
<input type="checkbox"/>	Wiecking, Ken	Fri, 3:33 pm	RE: Update
<input type="checkbox"/>	Michael Weaver	Fri, 2:17 pm	Re: #
<input type="checkbox"/>	Michael Weaver	Fri, 2:01 pm	Re: #
<input type="checkbox"/>	Michael Weaver	Fri, 1:37 pm	Re: #
<input type="checkbox"/>	weaver@damien.edu	Fri, 1:18 pm	#
<input type="checkbox"/>	Apple Developer Connection	Fri, 1:02 pm	Apple Developer Connection News #487
<input type="checkbox"/>	REAL Software Newsletter	Fri, 12:03 pm	REAL Software Newsletter - November 2007
<input type="checkbox"/>	Robert X. Cringely	Fri, 11:22 am	I, CRINGELY: There is No Free Lunch
<input type="checkbox"/>	Wiecking, Ken	Fri, 10:58 am	Update

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Leopard Server add-ons

- 👁️ Timbuktu 8.7
 - 👁️ allows for remote access and file transfer over IP, rendezvous, skype, dialup
 - 👁️ legacy support back to v.4.8
 - 👁️ Great for a pied a terre then run ARD locally
- 👁️ Apple Remote Desktop
 - 👁️ Great for managing groups of computers
 - 👁️ File copying is slow/impossible
 - 👁️ Unix Command Line broadcast is indispensable
- 👁️ Gradekeeper
 - 👁️ Teach your teachers to use it, students and parents love to see updated grades online
 - 👁️ Easy to use, integrates with many SIS systems
- 👁️ SNMP tools
 - 👁️ Intermapper:network monitor
 - 👁️ Cybergauge:traffic monitor
 - 👁️ Whistle Blower: checks services, reboots if needed

Recipe: Soup to nuts with OSX server

- ① What to get:
 - ① Leopard server
 - ① Intel machine (laptop, mini, tower, xserve—depends on load)
 - ① Airport Extreme n access points
- ① What to setup: The essentials
 - ① AFP for student and faculty users
 - ① DNS local at least (“slave”) if not master
 - ① Web for local documents, more if public, including weblogs and wiki
 - ① LPR for printer capture
 - ① Software Update server for local updates (broadcast this address to clients w/ARD)
 - ① RADIUS and WPA2 for wireless clients—works with Airport Extreme unit above
 - ① NAT/DHCP/firewall if you are physically firewalling using the server
 - ① If you have external access or NAT running, setup VPN for your home users

Recipe: Soup to nuts with OSX server

- Optional installations
 - iCal server for iCal and other webCal clients
 - iChat server for local and remote jabber chats, collaboration
 - Mail server with antivirus and antispam services running
 - FTP only if needed
 - Open Directory for roaming users
 - SMB if needed for windows users
 - QTSS and Podcast producer work with Xgrid for media production
 - Time Machine server
 - Spotlight server

Recipe: Soup to nuts with OSX server

- 👁 Things you should really add:
 - 👁 Passenger for account and password generation/import/export
 - 👁 Timbuktu for remote access/control/file sharing
 - 👁 Apple Remote Desktop installed for computer administration
 - 👁 Gradekeeper for grades, faculty upload to the server in their Sites folder
- 👁 Things that will make your life easier:
 - 👁 Intermapper, at least the limited version for monitoring the network
 - 👁 IPNetMonitor—excellent network tool, for diagnosis, testing
 - 👁 Cybergauge or other SNMP traffic tool
 - 👁 WhistleBlower, restarts services if they fail

Case Studies/Scenarios

- 👁 Small school
- 👁 Medium school
- 👁 Large campus
- 👁 District