Time Management for System Administrators: A New Approach

by Thomas A. Limoncelli
Meeting with My Boss
Who is this guy?

- SA since 1988
- Work at companies such as Google, DFA, Lumeta, Bell Labs
  - *Time Management for System Administrators*
  - *The Complete April Fools day RFCs*
  - *The Practice of System and Network Administration*
- http://EverythingSysadmin.com
Introductions

• Other qualifications:
  • Was a time-management disaster... *but I got better!*

• Audience poll: (show of hands)
  • Sysadmins / Managers
  • Unix / Windows
  • Senior / Junior

• What are your biggest time management issues?
Why TM for Sysadmins?

- The problems are different:
  - Boss likes: When we get projects done. Customers like: When we are available.
  - Higher degree of customer interruptions.
  - More individual projects than we have time for.
- The solutions are different: We’re geeks, we have geek tools.
- Lack of mentoring
  - Other careers have more opportunities for mentoring on these issues.
- Our mentoring is technical.
What I learned by mentoring

- Conclusions:
  - Specific techniques work!
  - No “map” to fit them together.

- Developed a new approach:
  - Identify “type of day”
  - Pick appropriate tools
  - Change when surprises come
How the day will end...

...is determined by how we approach it at the beginning.
Overview

1. Introduction
2. Tools needed for “Any Day”
3. Tools needed for “Meeting-Free Days”
4. Tools needed for “Mixed Days”
5. Tools needed for “Packed Days”
6. Summary

Please call out questions any time!
3 General Types of Days
Step 1: Identify “type of day”

- Meeting-Free
- Mixed
- Meeting-Packed
“No Meetings”

Strategy: Focus on projects, do interrupts as needed.
“Mixed”

Squeeze in important tasks between meetings.
“Packed With Meetings”
Manage meetings effectively + some multitasking.
Step 2: Pick appropriate tools

<table>
<thead>
<tr>
<th>Prioritized Todo List</th>
<th>Maintain Focus</th>
<th>Make most of limited time</th>
<th>Efficient Meetings</th>
</tr>
</thead>
</table>

No Meetings

Some Meetings

All Meetings
“Special Days”

Prioritized Todo List
Coverage
Make most of limited time
Comm., Shield, Follow-up

out-of-office
half-day
emergency outage
Chapter 2: Tools needed for All Days
What tools are needed all days?

* Calendar:
  * Keeps our appointments so our brain doesn’t have to.
* Todo List:
  * Things to do, tasks we’ve agreed to do. “Assures perfect follow-through”
* Prioritization Techniques
Principles

- **One System:** Keep all time-management information in one place

- **Conserve Brain Power:** Avoid distractions, focus on one thing at a time

- **Use Routines:** Mass-produce things that you do often. “Think once, do many”

- **Same tools everywhere:** Use the same tools for your personal-life. The more practice you get, the faster things become “second nature”.
Calendar Management

Goal: Never miss an appointment, meeting, or social event.

Date
Record all appointments, dates, events, meetings, etc.

* One place for all calendar info, including social events.
* Review at the start of the day, through out the day, and before you go to sleep.

* Check for conflicts before agreeing to an appointment.
How I mark calendar days

- Top line:
  - Birthdays days, scheduled vacations (for me and others)
- Middle:
  - appointments throughout the day
- Bottom line:
  - night activity ("Date with Chris", "Board Meeting", "Laundry")
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Chris bday</td>
</tr>
<tr>
<td></td>
<td>Bob out until 30th</td>
</tr>
<tr>
<td></td>
<td>10-11 cm meeting</td>
</tr>
<tr>
<td></td>
<td>noon all hands</td>
</tr>
<tr>
<td></td>
<td>2-2:30 mtg w/CIO group</td>
</tr>
<tr>
<td></td>
<td>7pm BZ board mtg</td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>
Todo lists

Never forget a request; prioritize your work.

Date
Where to keep the data?
NotePad, PDA or PAA?
Either works just fine

<table>
<thead>
<tr>
<th>Feature</th>
<th>VIM</th>
<th>PDA</th>
<th>PAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>One to-do list per day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Kept in a single place</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>With you all the time</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Easy to access</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Editor</td>
<td>PDA</td>
<td>PAA</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------</td>
<td>--------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td><strong>Pros:</strong></td>
<td>+ Free.</td>
<td>+ Beeps@appt</td>
<td>+ Spontaneous</td>
</tr>
<tr>
<td></td>
<td>+ No refills</td>
<td>+ Sync w/ PIM</td>
<td>+ Make your own system</td>
</tr>
<tr>
<td></td>
<td>+ Backups?</td>
<td>+ Backups</td>
<td>+ Theft is rare</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ Easy 2 carry</td>
<td></td>
</tr>
<tr>
<td><strong>Cons:</strong></td>
<td>- Not always accessible</td>
<td>- Distractions</td>
<td>- No backups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Inflexible</td>
<td>- Refills every year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Upgrade$</td>
<td></td>
</tr>
</tbody>
</table>
PDA advice

* The PalmOS “Todo” function is very simplistic.
  * Add DateBook VI (www.pimlicosoftware.com)
  * All “The Cycle” techniques are possible
* Other fine software:
  * iPhone: Appigo Todo (www.appigo.com)
  * iPhone+Mac: OmniFocus (www.omnigroup.com)
  * Mac: Life Balance (www.llamagraphics.com)
  * FranklinCovey software for Palm
* Tom’s list:
  
  http://wiki.everythingsysadmin.com/twiki/bin/view/TM2SA
PAA Overview

Left Side
- One page per day
- Pre-printed with dates
- Daily Task List
- Status, ABC, Task
- Appointment Schedule

Right Side
- “Record of Events”
- Wide-open space for:
  - notes, ideas, diagrams
  - special check-lists
  - “Things to pack” lists
  - “What to bring” lists
<table>
<thead>
<tr>
<th>Day</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

**Appointment Schedule**

**Daily Notes**

**Daily Notes**

*As that would prove others, first do it to the master of himself.*

- Philip Maugham
Task Management

How to get it all done without going crazy (or forgetting anything important)

Date
“The Cycle”

- Todo list
  - Perfect follow-through / Never forget a task
- Datebook/Calendar
  - Track appointments, commitments, events
- Long-term and Life Goals
  - Get where you want to go
Memorize Everything

-- vs --

Zillions of Scattered Notes

-- vs --

The Never-Ending List of

Doooooooom
Why do “todo lists” fail?

- We rely on “known-faulty” hardware
  - (Our brain forgets)
- We don’t keep them all in one place
  - Many scattered pieces of paper
- We keep many lists
  - Half are out of date
- We keep one master list
  - Too big, too scary
  - The Never-Ending Todo List Of Doooooooom!
“The Cycle”

- 365 “todo lists” per year
  - Doesn’t rely on our brain
  - One place to keep everything
  - Prevents “list of doooooom”-like problems
- Keep it as simple as possible!
  - Even a NotePad user can do it!
Monday, April 14:

- **Task A**  DONE
- **Task B**  DONE
- **Task C**  DONE
- Task D
- Task E
Move to tomorrow

Monday, April 14:
- Task A  DONE
- Task B  DONE
- Task C  DONE

Tuesday, April 15:
- Task D
- Task E
New item? Add to the list!

Monday, April 14:
- Task A  DONE
- Task B  DONE
- Task C  DONE

Tuesday, April 15:
- Task D
- Task E
- Task F
...or tomorrow’s list!

Monday, April 14:
- Task A  DONE
- Task B  DONE
- Task C  DONE

Tuesday, April 15:
- Task D
- Task E

Wednesday, April 16:
- Task F
...or tomorrow’s list!

Monday, April 14:
- Task A  DONE
- Task B  DONE
- Task C  DONE

Tuesday, April 15:
- Task D
- Task E

Thursday, April 17:
- Task F
The 4pm check

- Pause to consider the remaining items
- Items due today:
  - Option 1: Call requester, negotiate extension
  - Option 2: Pawn off task to co-worker
  - Option 3: Work late
Let’s Practice!
Add the following items to your todo list

- Create account for “bob”
- Test new GCC release
- Report bug in product X
- Phone JP
- Add wiki page: new support hours
X       Done
—       Moved to future day

NO      Decided not to do it, record why & who told
  •     Delegated, record “to whom”

<May 14>    More info on May 14’s page

Commercial stationary uses a different notation and that’s ok.
Add the following items to your todo list

- Create account for “bob” ➜ Mark “done”
- Test new GCC release ➜ Incomplete (next day)
- Report bug in product X ➜ Mark “done”
- Phone JP ➜ JP will return in 2 days
## Prioritized Daily Task List

<table>
<thead>
<tr>
<th>ABC</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Create account for “bob”</td>
</tr>
<tr>
<td></td>
<td>Test new GCC release</td>
</tr>
<tr>
<td>X</td>
<td>Report bug in Product X</td>
</tr>
<tr>
<td></td>
<td>Phone JP</td>
</tr>
<tr>
<td></td>
<td>Add wiki page: new support hours</td>
</tr>
</tbody>
</table>
End of day: 1 item left!

<table>
<thead>
<tr>
<th>ABC</th>
<th>Prioritized Daily Task List</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Create account for “bob”</td>
</tr>
<tr>
<td></td>
<td>Test new GCC release</td>
</tr>
<tr>
<td>X</td>
<td>Report bug in Product X</td>
</tr>
<tr>
<td></td>
<td>Phone JP</td>
</tr>
<tr>
<td></td>
<td>Add wiki page: new support hours</td>
</tr>
</tbody>
</table>
End of day: 1 item left!

<table>
<thead>
<tr>
<th></th>
<th>ABC</th>
<th>Prioritized Daily Task List</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td>Create account for “bob”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Test new GCC release</td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>Report bug in Product X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phone JP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Add wiki page: new support hours</td>
</tr>
</tbody>
</table>
Leave work with a smile

- Clear your “todo” list at the end of the day by moving & marking.

- A System administrator’s work is never done. You can’t expect to finish all your tasks each day. However, you can be satisfied they have all been managed.
Control your time!

- Schedule your work
- Prioritize what you do
- Control the hours you work
More work than one 8-hour day?

- At start of day, estimate amount of work in hours.
  - Few items: easy to estimate
  - Many items: write estimates and total
- Move low-priority items to next day.
  - Start the day with just 8-hours of work.
  - Or “n” hours if you have meetings, appointments.
Super overloaded?

- Break projects into steps
  - List time for today’s step
  - Add this item to each day’s “todo list”
- Delegate
- Re-prioritize (re-negotiate)
- Ask boss for advice
Finish all of today’s tasks?

- Get a head-start on tomorrow’s work
- Reward yourself by...
  - working on a fun project
  - working on a low priority project
  - Coffee break!
- Go home early (?)
Working with tickets

- Schedule n-hours of “doing tickets” each day
- Use the todo list as a cache of tickets
- Your “working set”
Projects and Tickets

✦ “Glenn”, a sysadmin, was directed to “split your time evenly between helpdesk and projects”.
✦ When he planned his day, he added a “todo item” called “interrupts” which was always 50% of his time.
✦ Too many interruptions? Told me to go away (politely)
✦ Fewer interruptions? Extra time for projects.
Merge work & personal databases

- One unified calendar -- include social plans
- Only use a second calendar if you have a “classified work-life”

- Use calendar to allocate time for fun:
  - Plan a “date night” or “family night”
  - Hobby or personal project
    - Tom’s 2007 goal: See more movies!
Prioritization

Make sure the important stuff happens.

Date
What’s so bad about FIFO?

- Distraught over what order to do tasks on your todo list?
- What’s so bad about FIFO?

Benefit:
- it’s easy
- older items tend to “bubble” up to the top and get higher priority
- sounds great!
Prioritize based on customer perception

Prioritizing tasks so that users think you're a genius
What do customers expect?

- They want everything NOW but what do they expect?
- Some requests should be quick…
  - Reset a password
  - Assigning an IP address
  - Anything small impeding their work
  - “Hurry up and wait” things (order now, receive later)
- Some requests take a long time…
  - Installing a new PC
  - Creating a new service
- Emergencies: SAs will drop everything for major outages
### FIFO-based Priority

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Customer Expectation</th>
<th>Actual Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Add new CGI area to www</td>
<td>1 hour</td>
<td>30 min</td>
</tr>
<tr>
<td>T2</td>
<td>Create new account</td>
<td>Next day</td>
<td>20 min</td>
</tr>
<tr>
<td>T3</td>
<td>Debug minor NetNews issue</td>
<td>10 min</td>
<td>25 min</td>
</tr>
<tr>
<td>T4</td>
<td>Give IP addr to user</td>
<td>2 min</td>
<td>5 min</td>
</tr>
<tr>
<td>T5</td>
<td>Install new server</td>
<td>Next day</td>
<td>4 hours</td>
</tr>
<tr>
<td>T6</td>
<td>Order a software package</td>
<td>1 hour</td>
<td>1 hour</td>
</tr>
<tr>
<td>T7</td>
<td>Reset Password</td>
<td>1 min</td>
<td>10 min</td>
</tr>
</tbody>
</table>

- **Time: 360 minutes**

**Evaluation:**
- All tasks completed
- T4+T7: Unhappy!
# Expectation-based Priority

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Customer Expectation</th>
<th>Actual Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>T7</td>
<td>Reset Password</td>
<td>1 min</td>
<td>10 min</td>
</tr>
<tr>
<td>T4</td>
<td>Give IP addr to user</td>
<td>2 min</td>
<td>5 min</td>
</tr>
<tr>
<td>T6</td>
<td>Order a software package</td>
<td>1 hour</td>
<td>1 hour</td>
</tr>
<tr>
<td>T1</td>
<td>Add new CGI area to www</td>
<td>1 hour</td>
<td>30 min</td>
</tr>
<tr>
<td>T2</td>
<td>Create new account</td>
<td>Next day</td>
<td>20 min</td>
</tr>
<tr>
<td>T5</td>
<td>Install new server</td>
<td>Next day</td>
<td>4 hours</td>
</tr>
<tr>
<td>T3</td>
<td>Debug minor NetNews issue</td>
<td>10 min</td>
<td>25 min</td>
</tr>
</tbody>
</table>

- **Time:** 360 minutes
- **Evaluation:**
  - All tasks completed
  - Happy customers!

- No change!
- Much better!
Summary

• In both cases:
  • All tasks completed
  • (You did the same amount of work)
• In second case:
  • Customers much happier: less waiting

You did the same amount of work, but people were happier with your performance
Priorities

- Mark every todo item with an A, B, or C priority

- A -- Must be done today (due date is today)
- B -- Today, lower priority
- C -- Everything else!
## Day 2: Not enough time!

<table>
<thead>
<tr>
<th>ABC</th>
<th>Task Description</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Test new GCC</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>Add wiki page: new support hours</td>
<td>1/2</td>
</tr>
<tr>
<td>B</td>
<td>Write design for new office</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>Delete (after archiving) 50T</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>Find 3 new SAN vendors to bid</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Install new IDS system in test lab</td>
<td>8</td>
</tr>
</tbody>
</table>
Get control over your time

- Schedule your work
- Prioritize what you do
- Control the hours you work

- Impossible? Completely possible.
It only works if you use it!

- Carry todo-list everywhere
  - Smart Phone always with ya

- Always mark your calendar.

- Start each day by prioritizing and planning.
Summary of The Cycle

✱ Morning:
  ✱ (Add any repeating items, etc.)
  ✱ Too much to do? Prioritize!
  ✱ Work items in FIFO or prioritized order
  ✱ Take breaks
  ✱ “The 4pm routine”
That’s the Cycle!

* Questions?
Routines
Get **into** that old, boring routine!

I wish I never woke up this morning

Life was easy when it was boring.

*Darkness, The Police*
Turn chaos into routines

- Schedule key meetings the same time(s) each week
- “Gasoline on Sunday”
- “Empty water from A/C reservoir as you enter the building.”
Developing your routines

- Repeated events that aren’t scheduled
- When procrastinating takes longer than the task itself
- Things you forget often
- Low-priority tasks that can be skipped now and then but shouldn’t be
- Maintenance tasks: IT is like gardening
- Relationship development
Good habits save time

- Hesitate before pressing ENTER.
- Write the test before the code.
- “ping” before and after disconnecting any cable.
- Always backup a file before it is edited.
- Check for keys before leaving car, house, office, secured area, etc.
Automatic “Yes” Answers

- Would this be a good time to save my work?
- Should I bring my PDA/PAA with me?
- Should I record this task/event/date in my PDA/PAA?
- Should I call now that I’m going to be late?
Chapter 3:
Tools for a “Meeting-Free Day”
“No meetings” Days

**Goals:**
- Maximize project time
- Give customers attention they need
- Do any recurring tasks (daily, weekly, etc.)

**Techniques:**
- Start the day: “Invest 5 minutes” to prioritize and plan
- Maintain focus
- Handle customer requests intelligently
- Take breaks as needed
Start the day: “Invest 5”
Prioritize and mark “time blocks”
Maintaining Focus
Focus

How long does it take to complete a 2-day project?
Focus

• Focus is concentrated effort.
• “Users always bother me” == “I’m being prevented from maintaining focus”

• Interruptions are the natural enemy of focus.
• Returning from an interrupt is error-prone.
The uncluttered brain

- Our brain is only so big.
- It divides itself among all the things we are trying to focus on.
- Unclutter your brain.
Focus problems we cause

- A messy desk
- Visually complex items in front of us
- Icons on our desktop, Instant messenger clients, music, stock tickers, news tickers, “you have new mail” notifiers, games, multitasking overload.
- Clean up your workspace -- Free your mind!
Multitasking

- Too much multitasking is a distraction
- Multitasking while talking to someone
  - ...is rude, makes conversation take longer
- When is multitasking appropriate?
  - Waiting for long batch jobs
Interrupts from others...
Redirecting Interrupts

- If someone wanted to interrupt you to ask a question, how do they find you?
- Does their web browser start-page tell them how to reach the helpdesk?
- Are proper channels properly clearly communicated?
- Can you re-arrange seating so they walk by your co-workers before they reach you?
Mutual Interruption Shield

- Each person picks a time of day to be the interrupt shield.
- While shielded, you have productive project time.

<table>
<thead>
<tr>
<th>Without Shield</th>
<th>With Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>You</strong></td>
<td><strong>Co-Worker</strong></td>
</tr>
<tr>
<td><strong>AM</strong></td>
<td>Frustrated by constant interruptions</td>
</tr>
<tr>
<td><strong>PM</strong></td>
<td></td>
</tr>
</tbody>
</table>

- You
- Co-worker
Org structures based on this

- Split into a tier 1 / tier 2 structure
  - Tier 1 -- “Customer facing”
    - Handles 80%, bumps 20% up to tier 2
  - Tier 2 -- “Project & Engineering”
- Physical layout:
  - Make sure customers must trip over “customer facing” people to get to Tier 2.
  - Move Tier 1 offices to high-traffic areas
  - Keep Tier 2 relatively obscured
Peak time for focus

- When during the day can you focus best?
  - Different for each of us.
  - Do you know your peak hours?

- “First hour of the day”-Rule
  - The fewest interruptions happen the first hour of the day because nobody else
  - Therefore, don’t use it for junk tasks like email.
Handling Interrupts without being a JERK
Saying “no” or “not now”

When someone makes a request, they expect to be heard.

Corollary: They will be unhappy if they don’t feel heard.
Saying “no” with compassion

* How to say “no” without sounding rude?
  * Take the customers needs into account
  * “Say with action” (not words) that the request will be completed
For each request

Pick one:
- Record it
- Delegate it
- Do it
When to “record it”?

- I’m in the middle of another project
- Not urgent
- Not a “while you wait” request
Other ways to record request

- Create a “ticket”
- Write in your PDA or todo-list system
- Have them create the ticket -- tell them the words to use
When to “delegate”?

- Someone else can do it
- Too urgent to put off
Effective Delegation

- Three things to explain to “stucky”:
  - What you expect the end-result to include
    - A specific, measurable result?
    - A checklist?
  - The resources/authority
  - A deadline
    - Let them suggest a date. If it’s acceptable, say “Ok, I’ll expect this to be done by [insert date].”
    - Record the deadline
When to “do it”?

- Emergency -- outage effecting multiple people.
- It’s my job to react in this situation.
- If it takes less than 2 minutes (“the 2 minute rule”)
- Requests from my boss.
Be creative

- Pre-allocate your next 2-3 IP addresses
- Keep common sysadmin apps running
- Automate, automate, automate
- Create self-service versions:
  - sudo shell scripts that check inputs do request
  - CGI scripts that check input then sudo
- (Note: Such scripts may result in security holes. Validate inputs, and be paranoid.)
Task Batching
“Fixed Length” tasks first

- **Fixed Tasks**: Takes a certain amount of time
- **Expanding tasks**: Expands to fill time available

**Example 1:**
- It is 5pm. Leave to meet friends at 7pm.
- Need to do 2 things before you leave:
  - Take out the trash before you leave
  - Practice Guitar Hero II

**Example 2:**
- Backup tapes must be changed each day.
Batching

- Batching: Do similar tasks in a group
- Examples:
  - Do all DNS-related tickets at once
  - Do all (certain kind of tickets) once a day/week
  - Make exceptions for emergencies
  - Start all new employees on Mondays
  - Weekly “walk-around” to stay in touch with users
Sharding

- Sharding: Break large quantities into chunks, or shards
- Term comes from Map-Reduce (Hadoop)
- Examples:
  - Visit 10 machines each morning until (task) complete
  - Schedule PC upgrades by hallway or department
  - Clean 1/8th of the storage room until complete
Elastic Tasks: Set a stop-point

- Elastic tasks: Tasks that stretch to fill all time (if you let them)
  - Examples: email, netnews, reading blogs, chatting with coworkers at the watercooler

- The solution: Set a “stop point”
  - Say to yourself:
    - “I’m going to stop reading email in 10 minutes”
  - Look at your watch, set a timer, do whatever it takes.

- What if I’m not done?
  - Don’t worry... the email will be there when you come back.
Declare a “fix-it day”

- Stop working on bigger projects to do tasks that have been lingering for too long
- Personal examples:
  - Inventory all the PCs
  - Clean the house
- Team Examples:
  - documentation fix-it day
  - find and fix slow PCs day
  - fix all the SSL certs day
Email

- **Strategy:** Use filters so there is one Inbox to read that is important.
  - 00.MustRead -- all things “to you”, from “important people”, and on urgent mailing lists
  - 5x.listname -- one per mailing lists
  - Inbox -- everything else

**Daily plan:**
- Read “00” when busy. “Inbox” when you have time.
- Everything else as recreation, or scheduled for a particular time blocks
And take breaks

- Take breaks. Your brain needs a rest. Really.

- Henry Ford, king of working people to death invented the coffee break because he found that people are more productive when they take breaks.
Tools for a “Some Meetings” Day
Goal: Squeeze productivity into the gaps between meetings.

- First thing: Review Todo list, prioritize, circle things that “have to be done today”
- Everything else:
  - Move to next day.
  - Notify people if this means adjusting deadlines.
- Between meetings:
  - Focus on those “key items”.
  - Get right to work.
  - No socializing.
How to get out of meetings

• Send a delegate.
  • Why is entire team attending?
  • Send a delegate to take notes.
  • Load up delegates with points to make.
  • Have delegate get you if certain topics come up.

• Announce “I can only stay for the first half”.

• Reschedule the meeting for some other time.
Chapter 4:
Tools for a “Packed Day”
“Packed Day”

• Goals:
  • Efficient Meetings
  • Some multi-tasking

• Techniques:
  • Start the day: “Invest 5 minutes” to prioritize and plan
  • Reschedule + communicate if deadlines need extensions
  • Take breaks as needed
Goal: Efficient meetings

1. All meetings should be a good use of your time.
   ✤ Ones that aren’t should be reformed or cancelled.
2. When I’m in a meeting, I should participate to my fullest.
   ✤ I should have a reason for being there.
   ✤ I should focus on this reason.
Who’s responsible for how effective/efficient a meeting is?

- Attendees: 50%
- Facilitators: 50%
Meetings run better when:
(Attendee responsibilities)

• Meetings start on time.
  • Arrive on time.
  • Quiet and ready to go.
  • A/V needs ready before meeting starts.
• Everyone pays attention.
  • Not reading email, chatting online.
• Hold back from funny comments.
  • Unless it the meeting needs some life.
How to “pay attention”

✦ Unable to pay attention?
  ✦ Offer to be the note-taker.

✦ Unable to resist email/IM?
  ✦ Don’t bring your laptop.
  ✦ Offer to take notes (if your laptop is projecting, you won’t be reading email)
Meetings run better when:
(Facilitator responsibilities)

- Have a written agenda.
- Meetings start on time.
  - Arrive on time.
  - A/V needs ready before meeting starts.
- End on time
Different meeting types

- Information:
  - Make your announcement then start Q&A.
  - Use Google Moderator.
- Discussion:
  - Facilitator is there to moderate, make sure everyone gets their thoughts expressed.
  - Tries to get closure (a decision) after people have talked enough.
- Status:
  - Give each person 1 minute. Time them.
  - No discussion until everyone has spoke.
Let agenda manage themselves:

- Use a Google Doc, Wiki, or other shared document
  - At top:
    - Write goal of meeting, time, who should attend, etc.
  - Agenda for next meeting:
    - (anyone can log in and add/comment)
  - Agenda and notes for past meetings (in reverse chronological order)

- No agenda 12 hours prior? Automatic cancel.
“Weekly GSI Team Meeting”
Meeting Guidelines:
• Weekly. 30 minutes but book 1 hour just in case.
• Who should attend: all core GSI members, plus TLs and PjMs involved in GSI.
• First meeting of each month includes updates from all the Tech Leads.
• How the agenda is built:
  • Anyone can add items to the agenda via the shared doc.
• No new agenda items after 5pm the previous day.
• No agenda by 5pm PST? Meeting automatically cancelled.
• Default Agenda:
  • Announcements (if any)
  • First meeting of each month: Each TL gives a report (accomplishments, projects, and help needed)
  • Remainder of agenda items from shared doc.

Agendas and Notes:

2009-09-02 Weekly GSI-Team Meeting
• (bill) Review agenda for annual summit
• (mary) The new monitoring system

2009-08-26 Weekly GSI-Team Meeting
• Attendees: bill, mary, joe, sara, mark, tom, bob, julie
• Announcements:
  • Bill will be out of office all November
• Discussion of new monitoring thresholds:
  • Mary: too many false-alarms
  • Decision: No alert until 4 consecutive missed pings.
• Where to put new server:
  • Much discussion.
  • Decision: Rack 3 in room 2.

2009-08-19 Weekly GSI-Team Meeting
Other tips:

✤ Facilitator decides:
  ✤ Order of agenda items
  ✤ Laptop policy

✤ Only invite people that are needed.
✤ Facilitator should not be the note-taker. Too distracting.
How to have shorter meetings.

• Schedule 30-minute meetings, not 60-minutes.
• Meeting ends early?
  • Don’t ask, “is there anything else?” Just say “we’ve reached the end of the agenda. Thank you.” and leave.
• Feed people: Mouths busy with food don’t talk. (Unless you want to encourage discussion.)
Dealing with bad facilitators.

- Either reform them, or stop attending their meetings.
- Either way, let them know. *IN PRIVATE.*
- Explain the problems:
  - Meetings are longer than needed.
  - Meetings are unfocused.
- Suggest the Agenda Wiki, shorter timeslot, etc.
My meeting policy

After spending too much time in meetings I realized that if everything else can be budgeted away (travel, computing resources, etc.), I can introduce a new meeting policy for myself.

Budget

I have a budget for recurring meetings. The budget stands at 12.5% of my working time (40 hours per week \( \Rightarrow \) 5 hours of meetings, i.e. one per day). Weekly meetings are not supposed to take more than 7.5% (i.e. I have 3 hours of weekly meetings per week), and the other 5% (two hours) are reserved for less-often meetings.

Confused? Current weekly meetings:
* all-team meeting, one hour
* team-leads meeting, one hour

And I have one hour left for weekly meetings.

Loopholes:

Of course, the budget above doesn't deal with non-recurring meetings. I'll see about those if they happen to become a problem.

Meeting times

Due to my current timezone and the teams I'm working with, all recurring meetings will be restricted to a specific time slot: after 15:00 Zürich time.

Non-recurring meetings are restricted to the same time slot, exceptional cases (people traveling here, etc.) being, of course, an exception.

Furthermore, Mondays and Fridays are not favorable to meetings. I can have meetings on those days, but I won't be happy.

Meeting types

Of course, there are different meeting types/purposes, so treating all the same is not right. However, I'll make it simple: any 'meeting' whose purpose is not:
* to solve a technical problem
* a collaboration that will result in a design document

is a meeting, and is a subject of the above rules.

This is the “meeting budget” a co-worker recently announced for himself.
Chapter 5:
Tools for a “Out of Office”
“Out of Office”

• Goals:
  • Coverage
  • Keep others informed.

• Techniques:
  • Review upcoming Todo lists.
  • The OOO countdown
  • Set appropriate messages.
Short-term Out Of Office:

- 1-2 days
- Check Todo List.
  - Manage “due date” items.
  - Contact requester, renegotiate date or delegate.
  - Might be better to do with your boss than requester.
Long-term Out of Office

- Vacations, trips, etc.
- Establish a “count-down”:
  - $x$ days in advance:
    - Announce to boss, others.
    - Plan coverage (co-worker, clerk, etc.)
      - Coverage doesn’t have to be perfect. Just recurring todos, common tasks.
    - Timeline should be written, have manager signoff.
- Communication:
  - If/when any email announcements, etc.
Long-term OoO (pt 2)

- Training:
  - Train those that will cover for you.
  - Update documentation.
  - Have them practice

- 7 days prior:
  - Coverage people should do all tasks at least once.

- 1 day prior:
  - No “root” or “administrator” access for you!
  - Set “vacation” message on email, voicemail, etc
On Return...

* Checklist:
  * Disable “vacation” message on email and VM
  * Meet with coverage people.
    * Identify gaps in documentation, other issues.
  * Enumerate tasks left for when you return.
    * Hopefully a ticket is filed for each.
  * Announce you have returned (reply-all to previous announcement email? walk around saying “hi”?)
Chapter 6: Tools for a “Half Day”
Half Day

• Example: The half-day before Thanksgiving
• Goals:
  • Don’t drop any high-priority issues / deadlines.
  • Leave on-time.
• Techniques:
  • Prioritize and schedule.
  • Limit elastic tasks.
  • Communicate, coverage, etc.
• Special case: day before holiday:
  • Often nobody gets work done. Is a party. Plan for this!
Chapter 7:
Tools for an “Emergency Outage”
**Day 3:**

<table>
<thead>
<tr>
<th>ABC</th>
<th>Prioritized Daily Task List</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Phone JP</td>
</tr>
<tr>
<td>A</td>
<td>Add wiki page: new support hours</td>
</tr>
<tr>
<td>C</td>
<td>Ticket catchup (3 hours)</td>
</tr>
<tr>
<td>A</td>
<td>Upgrade Oracle for Sales group</td>
</tr>
</tbody>
</table>
Emergency Day

- Was going to be a normal day, then a major outage happens.
- Goal:
  - Solve the outage!
- Techniques:
  - Be visible to customers.
  - Be focused.
  - Know when to accept help.
  - Communicate the management chain and/or customers.
Techniques

- Respond visibly:
  - Match customer expectation:
    - They want to see action - so do something visible
    - “we’re down” web page, signs on wall, “running SAs”
  - After initial diagnosis, communicate.
    - Inform management (hourly?)
    - Review “todo list” -- Renegotiate “A” priority items.
      - Ask boss to do the negotiations. Excuse you from mtgs.
      - Benefit: keeps boss out of your hair.
Other tips...

- Accept help from others.
  - I’ve seen many sysadmins try to “go it alone” or not accept help during an outage. Accept offers of help.
  - Even a “second pair of eyes” is a powerful thing.
- Know when you are tired.
  - Assign external person to force you to take breaks.
  - Work in shifts for multi-day outages.
- Fix the urgent problem, save the long-term fix for later.
  - “Quick fix” is ok.
  - Schedule long-term fix for next maintenance window.
After an emergency, publish a “Post Mortem”

Goal:
- Document what went wrong, what went right, can be done to prevent this in the future.
- Non-Goal: to place blame.

List:
- What went wrong
- Timeline (pages, actions taken, emails sent, etc.)
- Core problems
- Preventions for the future:
  - List ticketId assigned to each recommendation
- People involved
Summary

- Plan how you will approach your day:
  - Meeting-Free / Mixed / Meeting-Packed
- Use appropriate tools:
  - All: Todo list + Calendar
  - Meeting-Free: Focus
  - Mixed: Squeeze in tasks where you can.
  - Meeting-Packed: Efficient Meetings
- Meeting efficiency:
  - Depends on YOUR activity and FACILITATOR’S planning.
Life Goals

Get what you want out of life!

Date
If you put the sand into the jar first, there is no room for the pebbles or the rocks. The same is true for your life: If you spend all your energy and time on the small stuff, you will never have room for the things that are important in life.
Make time for the big things

- When do we have time for big things?
  - Taking a long vacation
  - A week writing code to save months of labor
  - Answer: Never!
So what do we do?

- We make time.
- We schedule the vacation a far in advance.
- Weeks before we...
  - Train the person that covers for us.
  - Update documentation
  - etc.

- Other “big projects” require the same.
Life goals:

- Goals should be measurable: “Lose 20 pounds by January”, not “Lose weight”
- Don’t be afraid to dream
- What do you want to accomplish…
  - 1 month from now?
  - 1 year from now?
  - 5 years from now?
  - In your lifetime?
Exercise: Life goals

- Spend 5 minutes writing down your 1m, 1y, 5y, life goals.
- Write 1-2 per category (1 work, 1 personal)
- Nobody will be seeing these, feel free to write the secret goal that you may be embarrassed to share.
Actions to achieve goals:

<table>
<thead>
<tr>
<th>Category:</th>
<th>Goal:</th>
<th>Actions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Goal-planning is a life-time task

- Keep your list in your planner
- Add new ideas when you think of them
- Review it periodically

- This 5 minute exercise wasn’t enough time
  - Week-long workshops, weekend retreats, family discussions, etc
Routine: 1st day of month

- Re-read list of goals (keep copy in dayplanner)
- Sprinkle action items into your schedule that bring you closer to these goals.
- PAA: Do it when you load the next month of paper into your organizer
- PDA: Schedule a recurring event called “Monthly Goal Review”
What are you going to do with all this free time?
REVIEW:

- List 3 techniques you found most useful
- Circle the one you commit to doing

More tips:
www.EverythingSysAdmin.com
wiki.EverythingSysadmin.com
Please be verbose on the evaluation forms!

Time Management for System Administrators: A New Approach
by Thomas A. Limoncelli

Usenix LISA 2009, Baltimore, MD