Check the paper:
http://behdad.org/text
Agenda

• The Stack
• Shapers
• Shaper Consumers
• Problems
• Recent Advances
• More Problems
• Road Ahead

July 5th, 2009
Meet the Stack

• Pango
• HarfBuzz
• FriBidi
• Fontconfig
• FreeType
OpenType

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HarfBuzz

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Other Free Shapers

• ICU
• m17n
• SIL Graphite
Consumers

- GUI Toolkits
- Web Browsers
- Word Processors
- Designer Tools
- Font Design Tools
- Terminal Emulators
- Batch Doc Processors
- TeX Engines
Excellence

- Supported Font Formats
- Configuration Mechanism
- Transparent Font Fallback
- Standard Compliance
- Minority Scripts

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Problems

• Good Enough
• Segregated Efforts
Segregated Efforts

- Font packager's fault
- Font configuration GUI
- Vertical text
- Text Layout Summit
- unifont.org
- Graphite and m17n

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Recent Advances

- Streamlining font packaging
- Online font add/remove
- Automatic font installation

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Demo Time!

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Online font add/remove

1. gnome-settings-daemon monitors
2. g-s-d rebuilds cache
3. g-s-d signals via XSETTINGS
4. GTK+ catches, drops Pango caches
5. GTK+ sends "theme-changed"

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Automatic font installation
1. RPM detects font at pkg build time
2. RPM tags package using fc-query
3. PackageKit installs GTK+ module
4. GTK+ overrides Pango default fontmap
5. PK receives font install request
6. Installed fonts are picked up
Major Problems
• CJK Problem
• Indic Problem
• Latin Problem

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Road Ahead

• HarfBuzz: layout, API, merge
• Subpixel rendering and positioning
• Font chooser dialog
• Font configurator
• Font websites
• Font viewer
• Application fonts

July 5th, 2009
Where is My Vote?