

HOB WEB

Architecture Overview

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Revision History

[illegible]

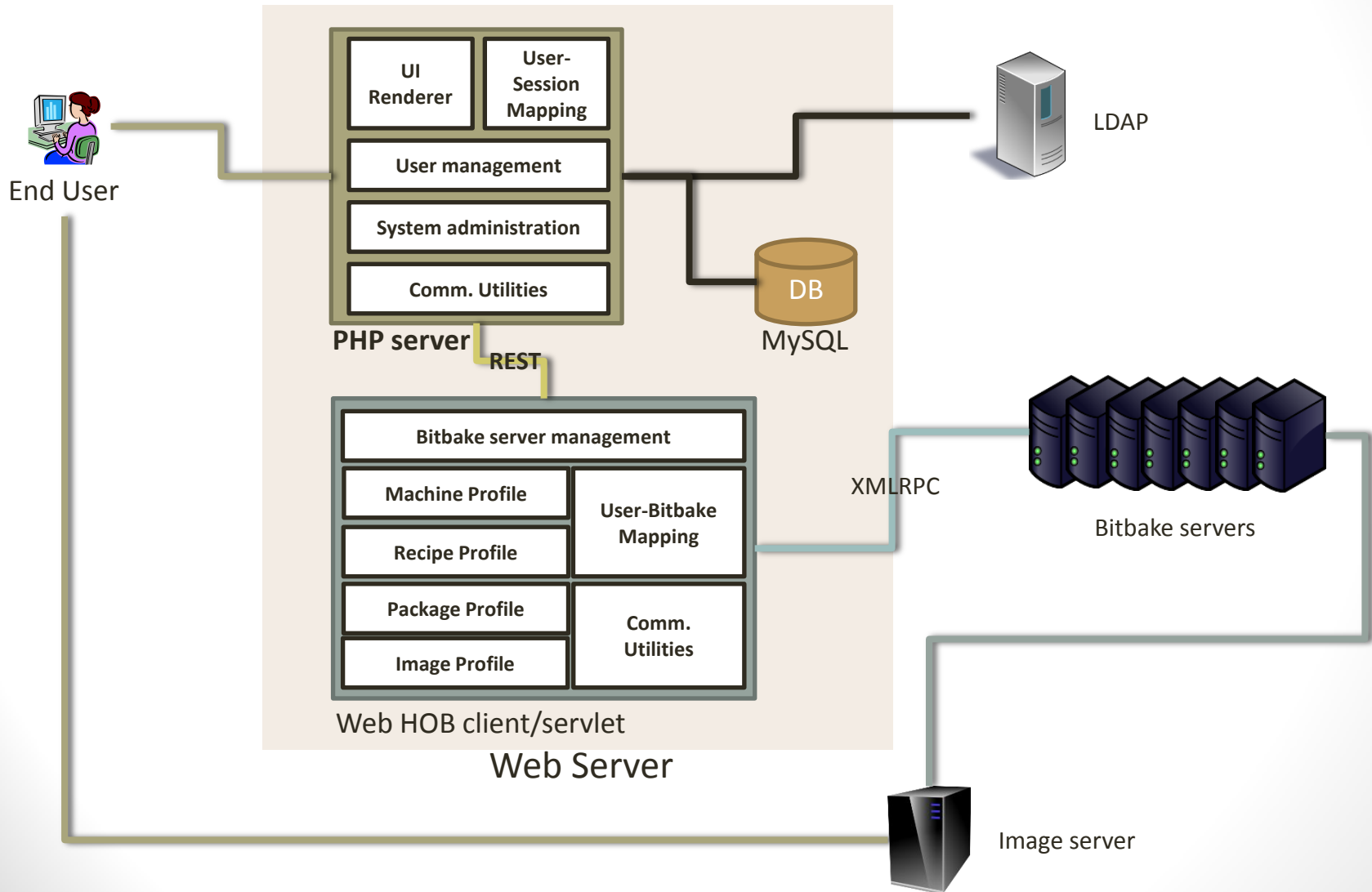
Goal

- To provide a WEB UI interface for end user to trigger a build with Yocto
- User can select platforms, recipes to build packages
- User can select what's to be included in the final image among the built packages where the accurate accumulated image size can be known beforehand
- User can select among previous successful build configurations to start another build directly without going through the configuration again
- User's authentication is closely linked with session, so that user will be resume to the live build state when user's browser reconnects to HOB WEB site

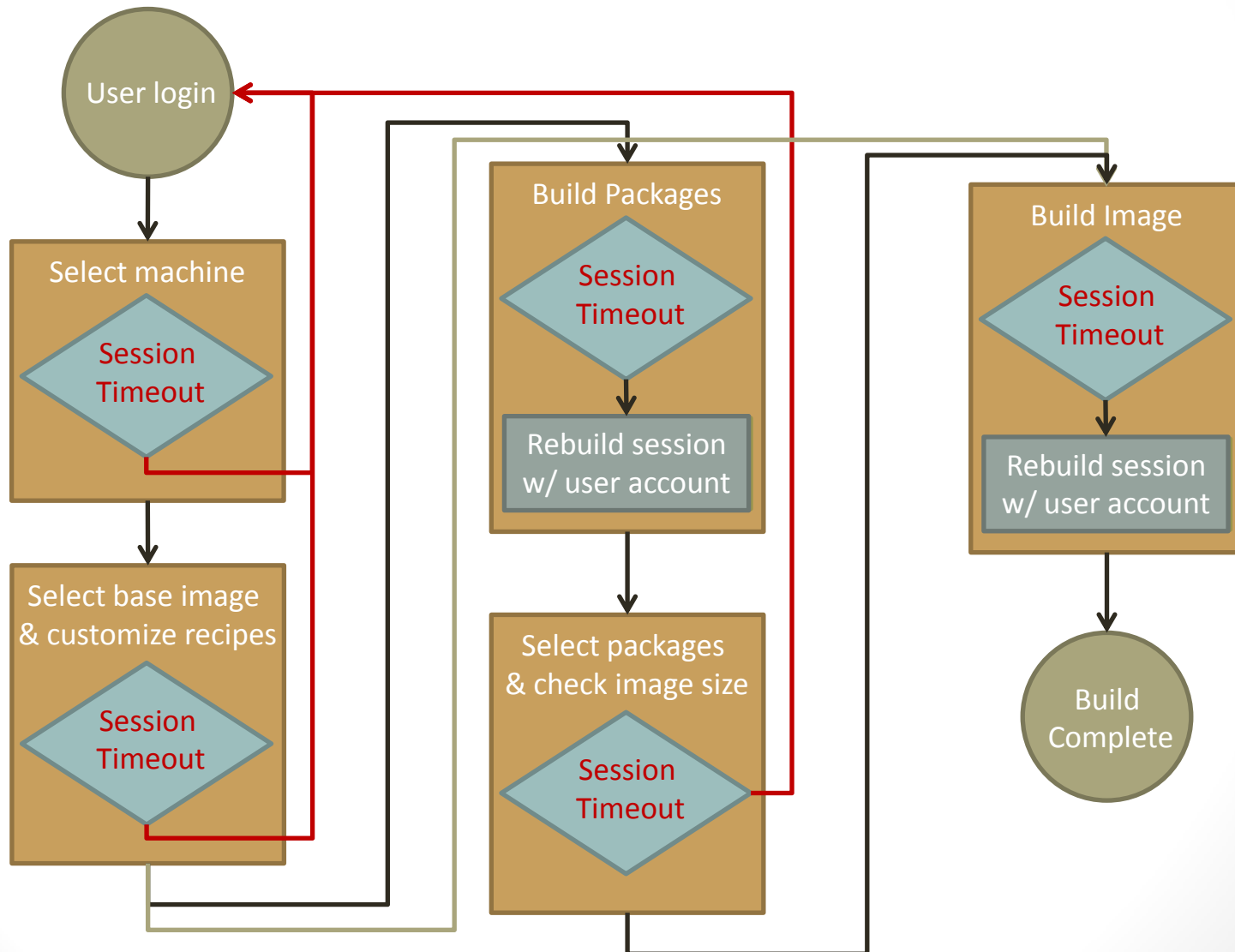
Design Consideration

- Use LDAP for user management and authentication, need at least 2 different roles – user and administrator
- Use MySQL to store user's successful build configuration
- Dynamically addition/removal of the connection between web server and bitbake server
- Regular heart beats to check the healthy status of bitbake servers
- The status of building packages and building image will be reflected in WEB UI
- Assume bitbake server could only serve one requestor at a time to assure performance and responsiveness, therefore we need to enforce a strict single-entrance policy
- Need a administrator UI to check the overall system status, add or remove bitbake servers, user managements or so
- How to utilize intermediate outputs to provide better UE via speeding up build process

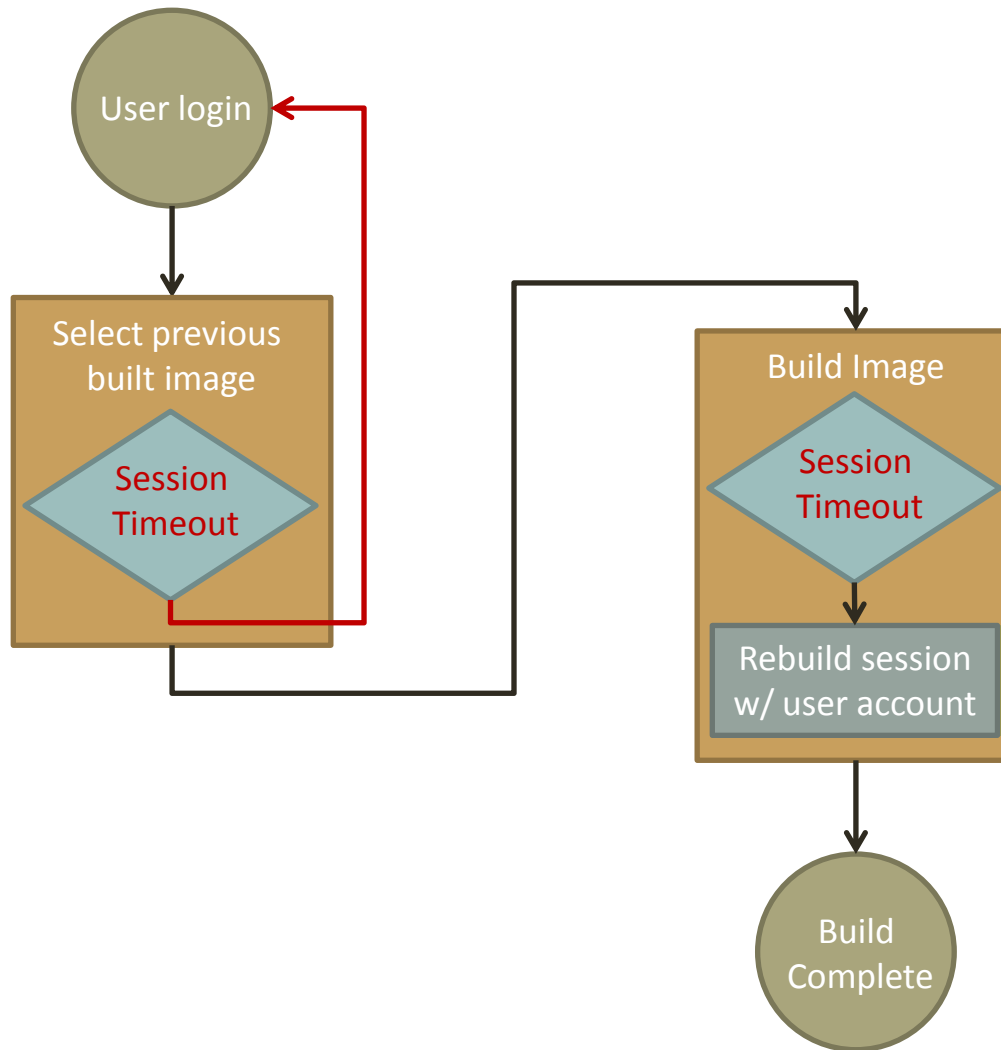
Architecture



Flow (from User's perspective)



Flow (from User's perspective)



User State Transition

