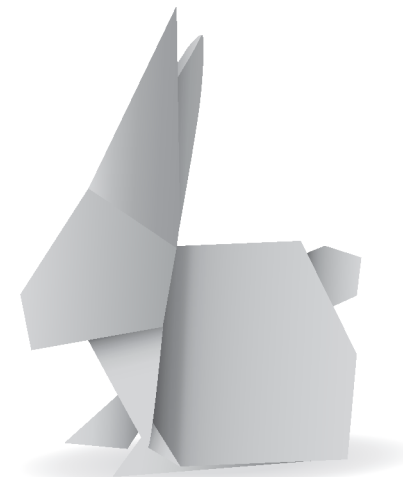




Core Features
Workflow Engine

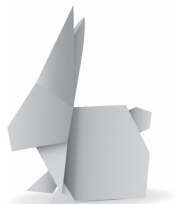
Oliver Welter, 2018/05



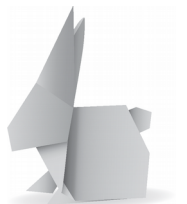
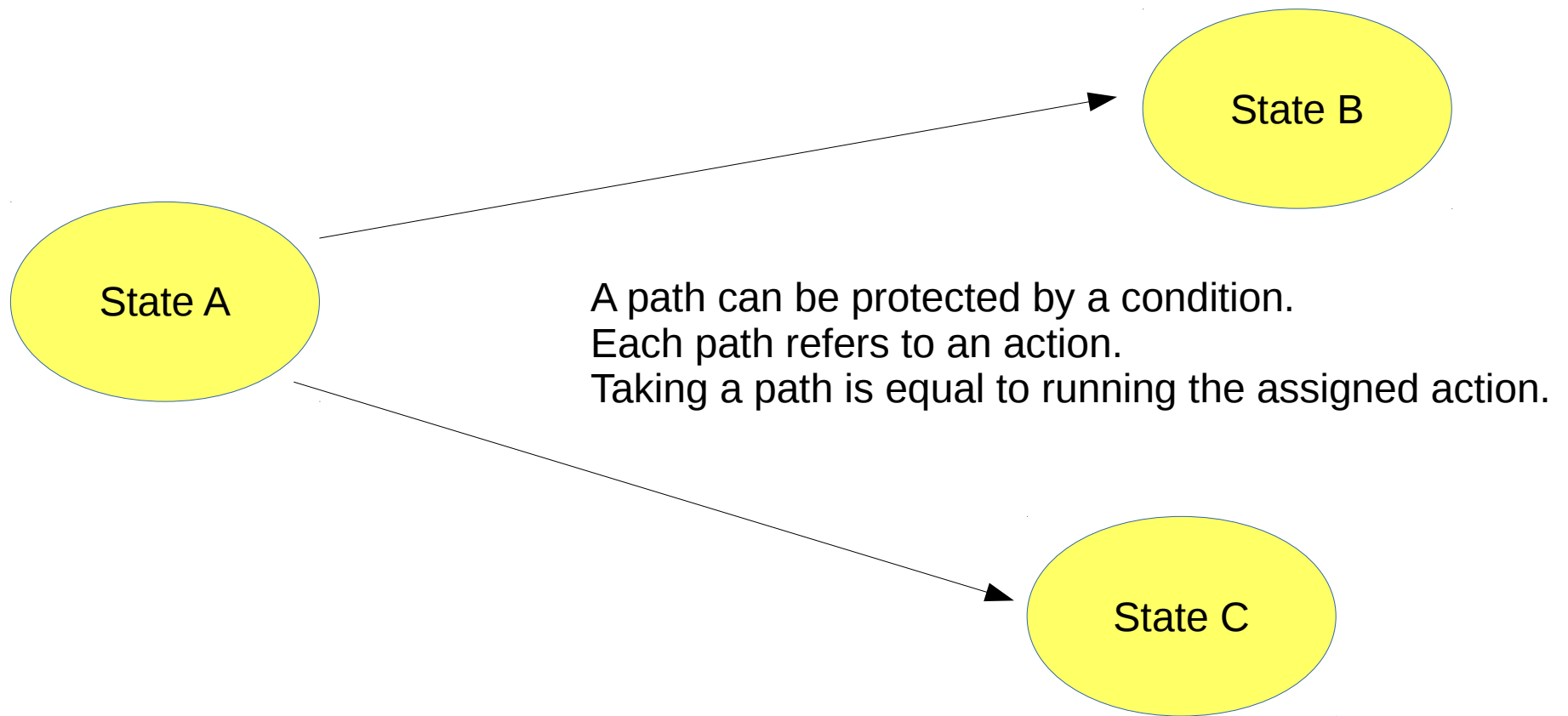
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Workflow Engine – OpenXPKI's magic carpet

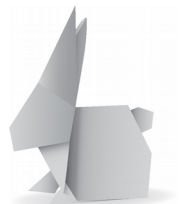
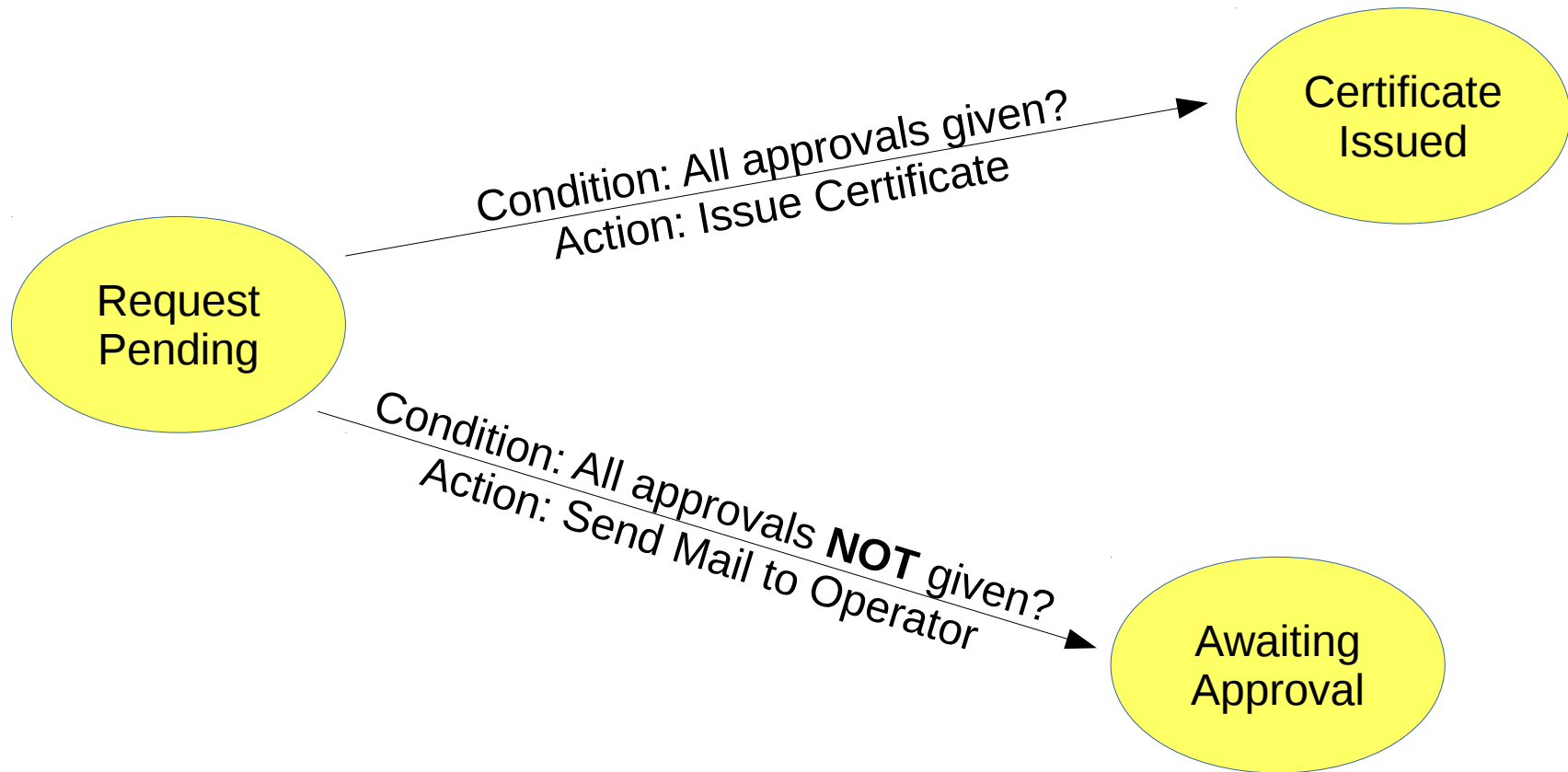
- Models business process as state machine
- State: Present Information
- Condition: Determine possible state transitions
- State Transition: Consume and Validate Input
- Action: Persist input and change external data
- Context: internal key/value scratchpad



Workflow Engine / How it works



Workflow Engine / How it works



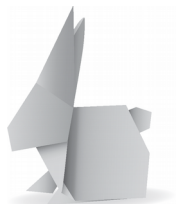
Workflow State

- Render data from workflow context on UI
- Embed data from external source in real time
 - DNS
 - CMDB Status
 - Date and Time



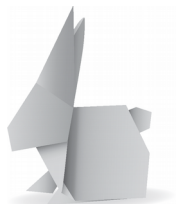
Workflow Condition

- Simple evaluation of context values
- Access control via user context
- Arbitrary checks using Perl code snippets
- Return value is always boolean



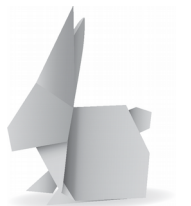
Workflow State Transition

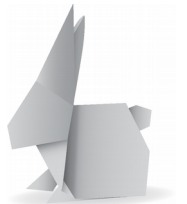
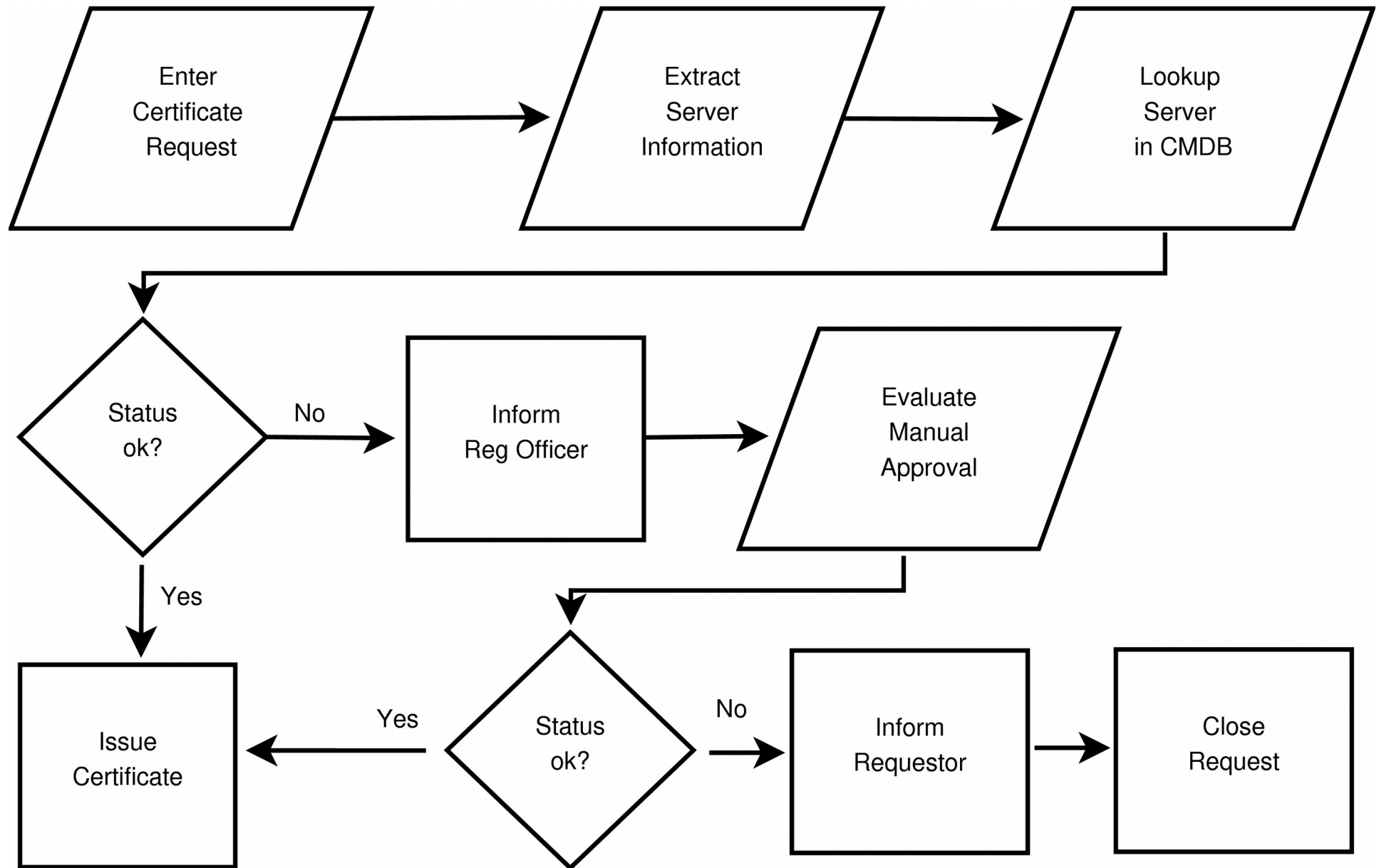
- Input fields of different types
 - text, drop-down, etc
 - options can be dynamically loaded
- Validators
 - Default for common formats (e.g. email address)
 - Arbitrary checks using perl code snippets
 - Return value is always boolean
 - Can print a custom warning to the UI



Workflow Action

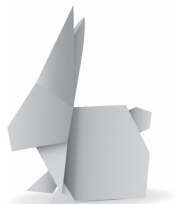
- Can access values from context
- Parameters via Config Layer
- Access to all objects inside OpenXPKI





Workflow Actions

- Extract data from certificate requests
- Compose certificate information (subject rendering)
- Issue and publish certificates / revocation lists
- Transform certificates and keys (Chains, PKCS12)
- Sending Notifications (E-Mail, ServiceNow, RT)
- Log reporting information



OpenXPKI Default Workflows

request_checker
certificate_signing_request_v2
certificate_enroll

certificate_revocation_request_v2
certificate_bulk_revoke
certificate_revoke_by_entity

crl_issuance

certificate_export
certificate_privkey_export
certificate_publishing
ca_publish

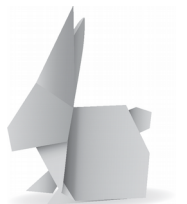
est_cacerts
est_csattrs

notify_expiry

report_full
report_list
report_summary

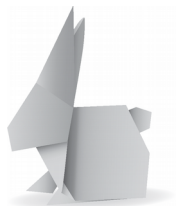
certificate_search
search_scep_workflow

change_metadata
set_motd
status_process
status_system

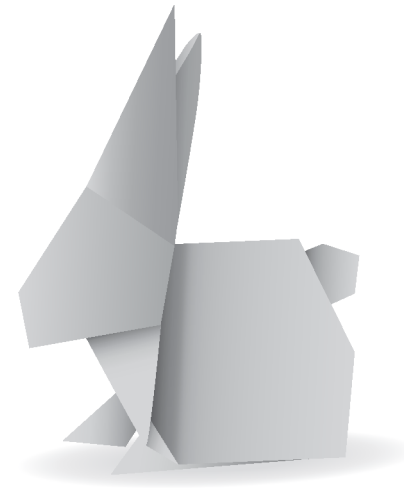


Workflow Engine / Summary

- customization of shipped workflows possible
- write your own workflow using pre-defined code blocks
- create new code for actions, conditions and validators
- user interface auto-generated from workflow config
- accessible via command line and RPC interface



Thank You!



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