

Runmodes and Configs for Fun and Profit

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Huh?

- Short Intro on how to use custom runmodes together with `slings:OsgiConfig` to easily manage different configurations and environments.
- Info based on real-world usage of these features in CQ 5.4
 - Sling trunk might have added features (e.g. save-back of configs)

Runmodes

- CQ - author or publish (Do NOT remove!)
- Multiple additional custom runmodes possible
- Suggested Use
 - Environment: local, dev, test, prod
 - Location: berlin, basel, timbuktu
 - Company: acme, partner, customer
 - Special system type: importer

Setting runmodes

- Via JVM Options (recommended)
 - Usually via `CQ_JVM_OPTS` in start script
 - `-Dsling.run.modes=author,dev,berlin`
- Via Sling Properties
 - File `launchpad/sling.properties`
 - `sling.run.modes=author,dev,berlin`

Steps

(as seen on South Park ;)



1) sling:OsgiConfig

Day CQ Mail Service ✕

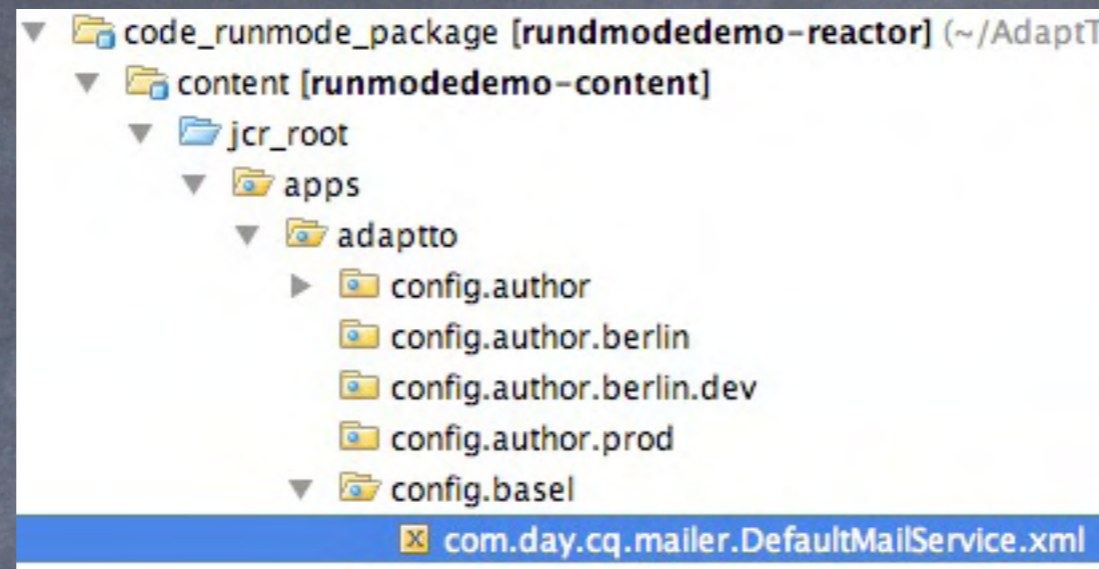
The mail service can be used to send emails.

SMTP server host name	<input type="text"/>	The mailer uses this SMTP server to send messages (smtp.host)
SMTP server port	<input type="text" value="25"/>	Port number to use to connect to the SMTP server (smtp.port)
SMTP user	<input type="text"/>	The user for authentication through SMTP (smtp.user)
SMTP password	<input type="password"/>	The password for authentication through SMTP (smtp.password)
"From" address	<input type="text"/>	The email address to use in the "From:" field of messages sent by the mailer (from.address)
SMTP use SSL	<input type="checkbox"/>	If enabled, an SSL connection is set up. (smtp.ssl)
Debug email	<input type="checkbox"/>	If enabled, interactions with the SMTP server are dumped to the operating system terminal that runs Sling (debug.email)

Configuration Information

Persistent Identity (PID)	<input type="text" value="com.day.cq.mailer.DefaultMailService"/>
Configuration Binding	Unbound or new configuration

2) Runmode-aware config



```
<?xml version="1.0" encoding="UTF-8" ?>
<jcr:root xmlns:sling="http://sling.apache.org/jcr/sling/1.0"
  xmlns:jcr="http://www.jcp.org/jcr/1.0"

  jcr:primaryType="sling:OsgiConfig"

  smtp.host="{String}basel-mailrelay.example.com"
  smtp.port="{String}465"
  smtp.user="{String}john.doe"
  smtp.password="{String}secret"
  from.address="{String}noreply@example.com"
  smtp.ssl="{Boolean>true"
  debug.email="{Boolean>false"

/>
```


3) Profit

Day CQ Mail Service ✕

The mail service can be used to send emails.

SMTP server host name	<input type="text" value="basel-mailrelay.example.com"/>	The mailer uses this SMTP server to send messages (smtp.host)
SMTP server port	<input type="text" value="465"/>	Port number to use to connect to the SMTP server (smtp.port)
SMTP user	<input type="text" value="john.doe"/>	The user for authentication through SMTP (smtp.user)
SMTP password	<input type="text" value="secret"/>	The password for authentication through SMTP (smtp.password)
"From" address	<input type="text" value="noreply@example.com"/>	The email address to use in the "From:" field of messages sent by the mailer (from.address)
SMTP use SSL	<input checked="" type="checkbox"/>	If enabled, an SSL connection is set up. (smtp.ssl)
Debug email	<input type="checkbox"/>	If enabled, interactions with the SMTP server are dumped to the operating system terminal that runs Sling (debug.email)

Configuration Information

Persistent Identity (PID)	com.day.cq.mailer.DefaultMailService
Configuration Binding	Day Communique 5 Mailer (com.day.cq.cq-mailer), Version 5.4.0

Naming Config Locations

- `/apps/adaptto/config/`
 - All Systems, runmode-independent
- `/apps/adaptto/config.berlin/`
 - Systems with berlin runmode
- `/apps/adaptto/config.dev.berlin/`
 - Systems with berlin AND dev runmode

Example – Instances

Instance	Runmodes		
	Type	Environment	Location
#1	author	dev	berlin
#2	author	prod	basel
#3	author	prod	berlin

Example – Configs

- Different mailserver configs per location
 - `config.basel/
com.day.cq.mailer.DefaultMailService.xml`
 - `config.berlin/
com.day.cq.mailer.DefaultMailService.xml`
- En-/Disabling debugging per environment
 - `config.prod/
com.day.cq.wcm.core.impl.WCMDebugFilter.xml`
 - `config.dev/
com.day.cq.wcm.core.impl.WCMDebugFilter.xml`

Hints & Suggestions 1/2

- Partial configs not supported
- Config with most matching runmodes wins
- Always set all properties to avoid confusion
- Use a type indicator (e.g. {Boolean}, {String}, etc.) in every property
- /apps wins over /libs (as always)
- KISS principle ("Keep it simple, stupid!")

Hints & Suggestions 2/2

- JCR installer keeps a digest. Thus you can't reinstall an identical config as just before.
- Config for same component at `config.dev.berlin` and `config.berlin.author` put on system with `dev`, `berlin` and `author` runmodes
 - JCR installer gives them the same priority, so do this only if you want one of them randomly applied ;)

Questions?

