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Software Architecture in Practice

Tactics for WoW



Find and Argue for Tactics for

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Quality attribute **Performance**

Source	100.000 independent clients
Stimuli	Generate on average 2 character events per second
Artifact	Game world server(s)
Environment	Normal operation
Response	Events are processed, game world state updated
Response Measure	With maximal 50 ms latency

Quality attribute	Modifiability
Source	Developer
Stimuli	Change landscape feature in game world
Artifact	Game world component
Environment	At design time
Response	Makes modification without side effects
Response Measure	Within 10 minutes

Quality attribute	Testability
Source	System tester
Stimuli	Expansion development finished
Artifact	Character database
Environment	Deployment time
Response	Test environment setup and tests executed without failures
Response Measure	Within 15 minutes, covering all use cases

Quality attribute

Source

Stimuli

Artifact

Environment

Response

Response Measure

Availability

Internal to the system

A crash

Realm server

Normal operation

Detects events, record it in log, continues in normal operation

Within one hour

Quality attribute	Quality attribute	Performance
Source	Source	100.000 independent clients
Stimuli	Stimuli	Request 76 GB expansion set download
Artifact	Artifact	Patch server(s)
Environment	Environment	Normal operation
Response	Response	Requests are processed, downloads are completed without data loss
Response Measure	Response Measure	Within 5 hours

For each, mention 1+ tactics to employ to control the response measure