

# **The process, technology and practice of Continuous Delivery**

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# Agenda

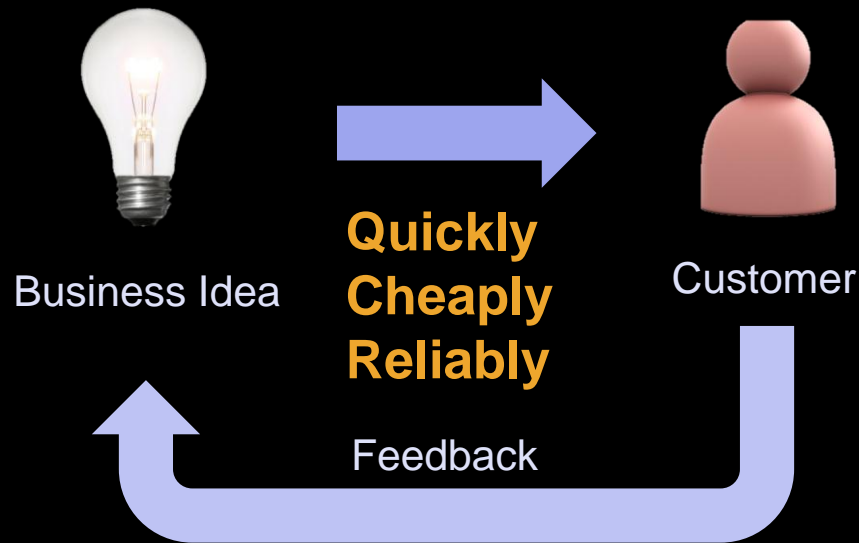
- **What is Continuous Delivery**
- **Continuous Delivery in the real world**
- **Examples of Supporting tools**
- **Q & A**

# What is Continuous Delivery?

*“Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.”*

- **The first principle of the agile manifesto.**
- **The logical extension of continuous integration.**
- **A holistic approach to development.**
- **Every commit creates a release candidate.**
- **Finished means released into production!**

# Why Continuous Delivery ?



But software lifecycles are (typically) ....

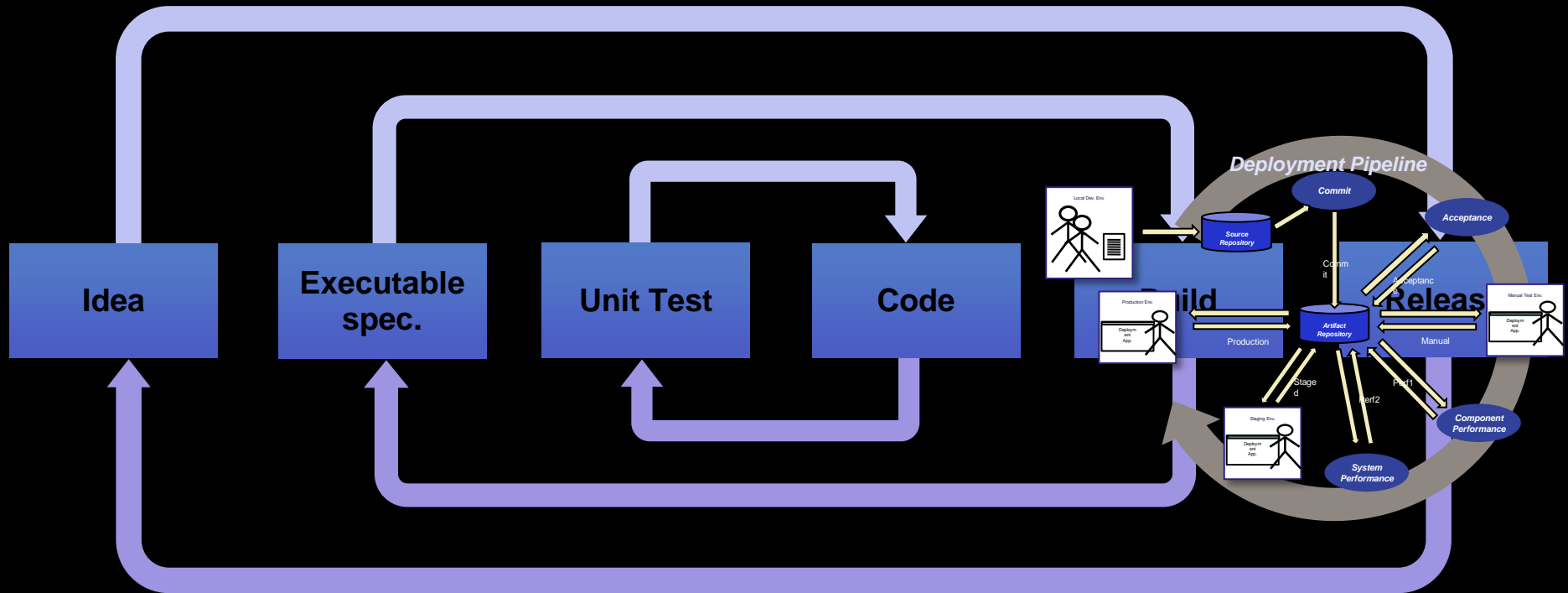
- Slow
- Inflexible
- Expose risk late
- High cost

## Lean Thinking ...

- Deliver Fast
- Build Quality In
- Optimise the Whole
- Eliminate Waste
- Amplify Learning
- Decide Late
- Empower the Team

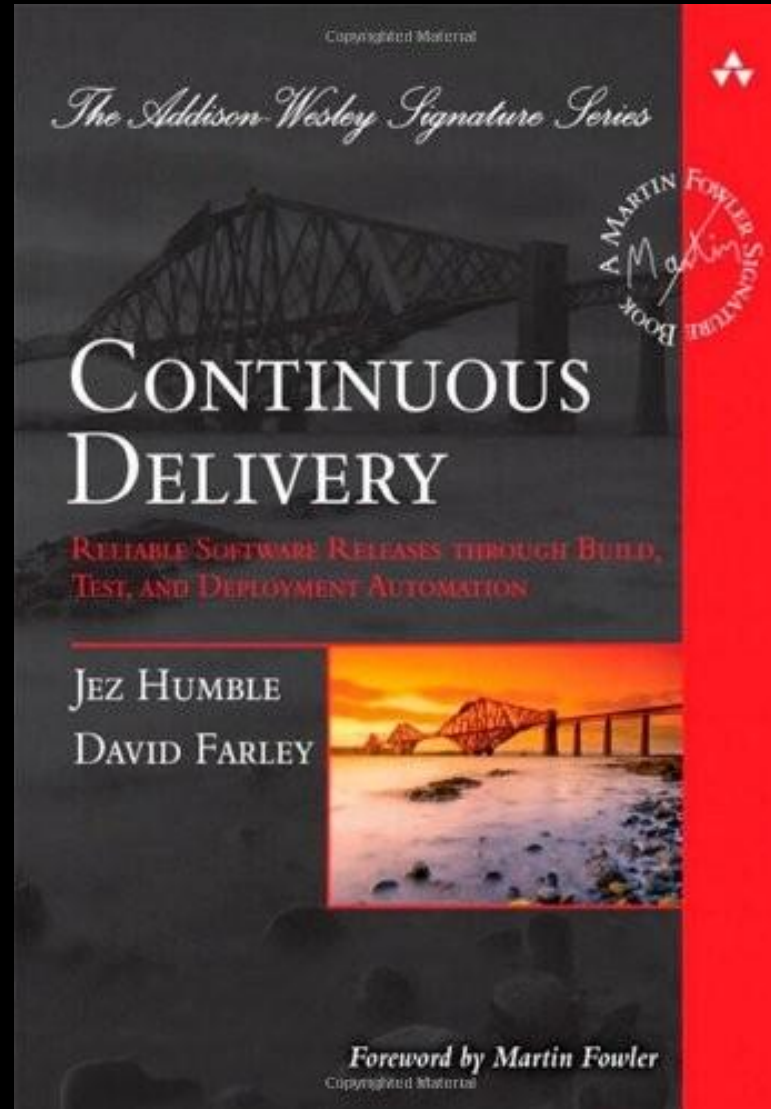
# The Theory

Smart Automation - a repeatable, reliable process for releasing software



MORE THAN JUST TOOLING ...

# Shameless plug



# The Principles of Continuous Delivery

- **Create a repeatable, reliable process for releasing software.**
- **Automate almost everything.**
- **Keep everything under version control.**
- **If it hurts, do it more often – bring the pain forward.**
- **Build quality in.**
- **Done means released.**
- **Everybody is responsible for the release process.**
- **Improve continuously.**

# The Practices of Continuous Delivery

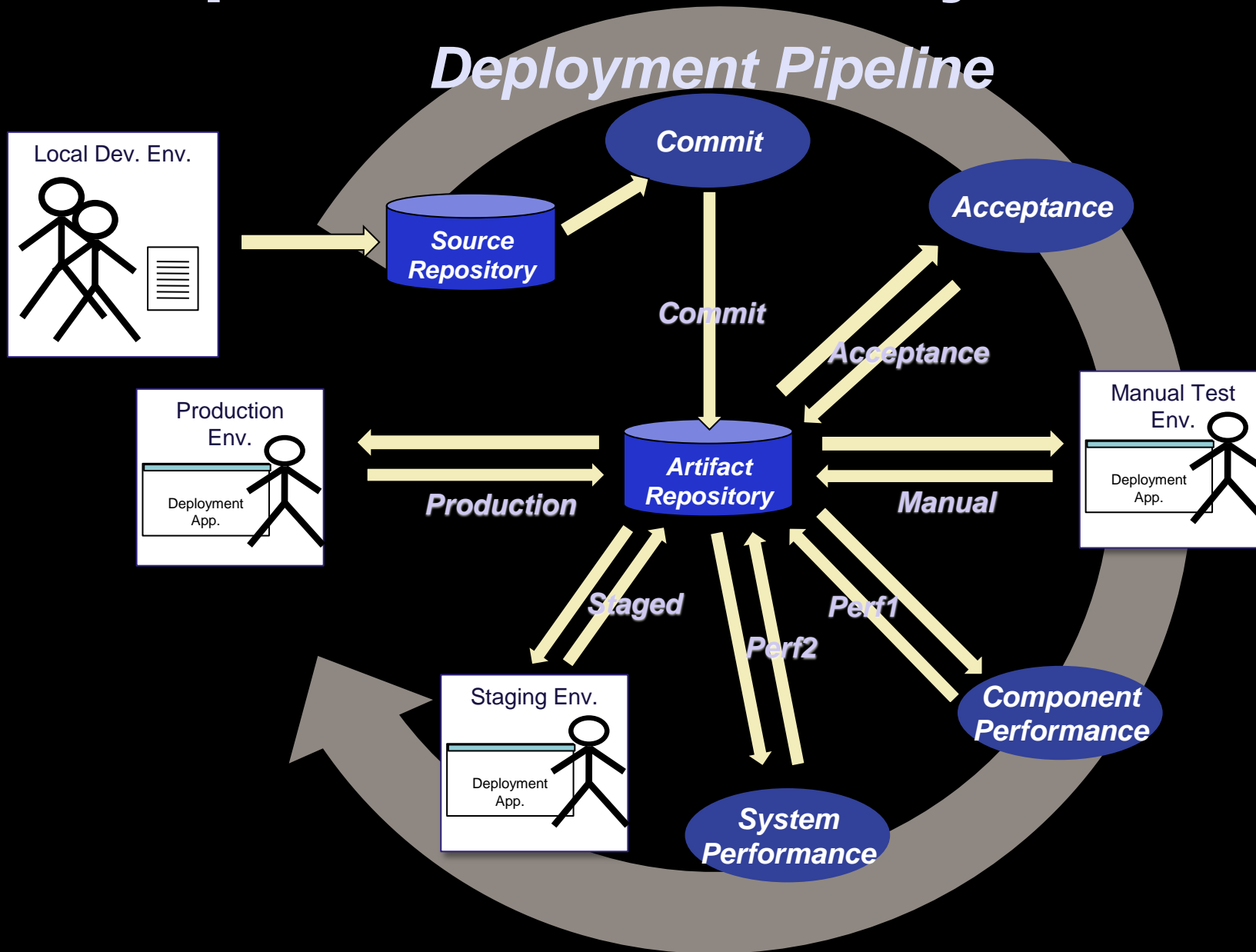
- **Build binaries only once.**
- **Use precisely the same mechanism to deploy to every environment.**
- **Smoke test your deployment.**
- **If anything fails, stop the line**



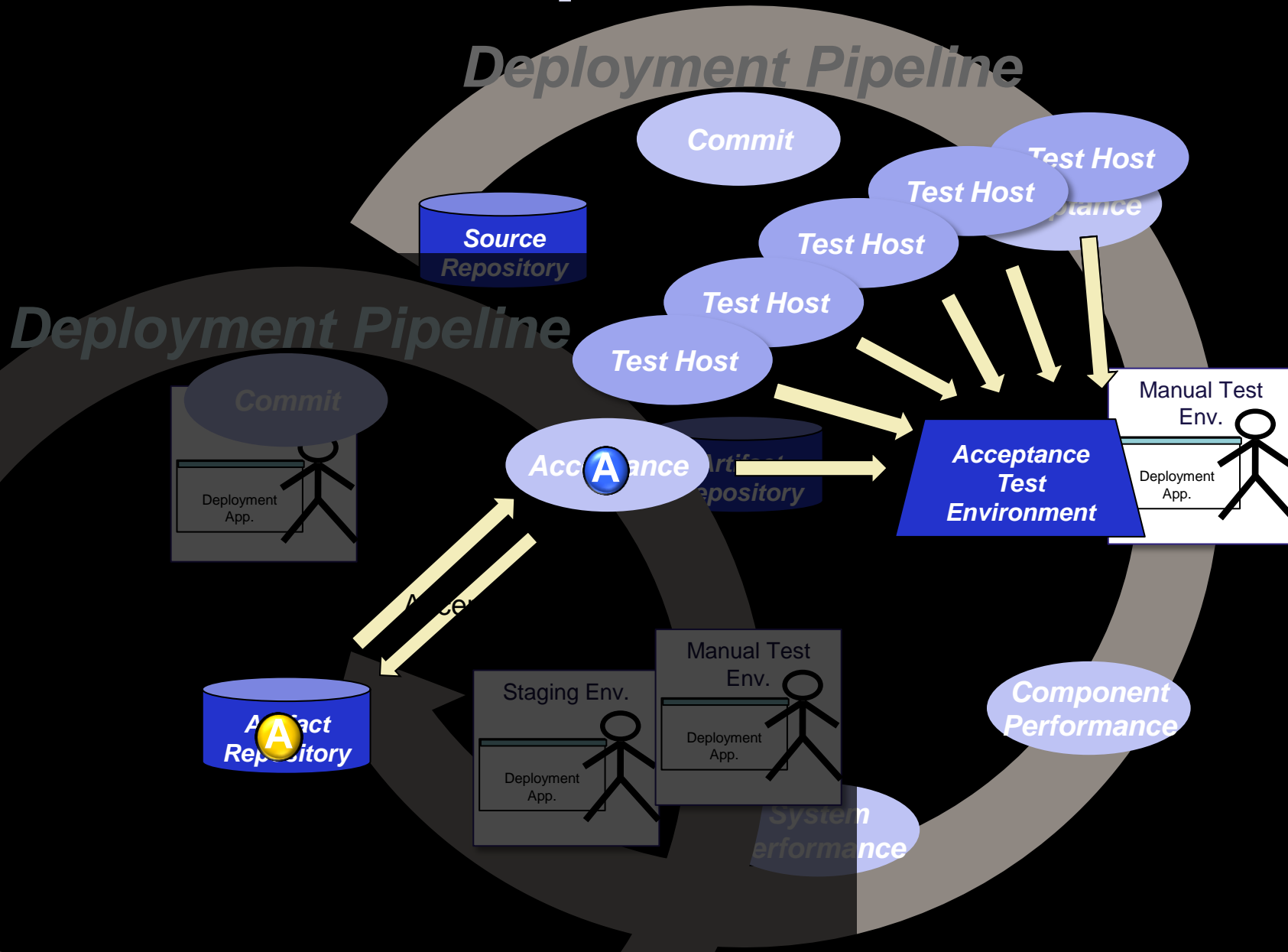
# **Who/What is LMAX?**

- **A greenfield start-up to build a high performance financial exchange**
- **The London Multi-Asset Exchange**
- **Allow retail traders access to wholesale financial markets on equal terms**
- **LMAX aims to be the highest performance retail financial exchange in the world**

# Example Continuous Delivery Process



# The Acceptance Test Grid

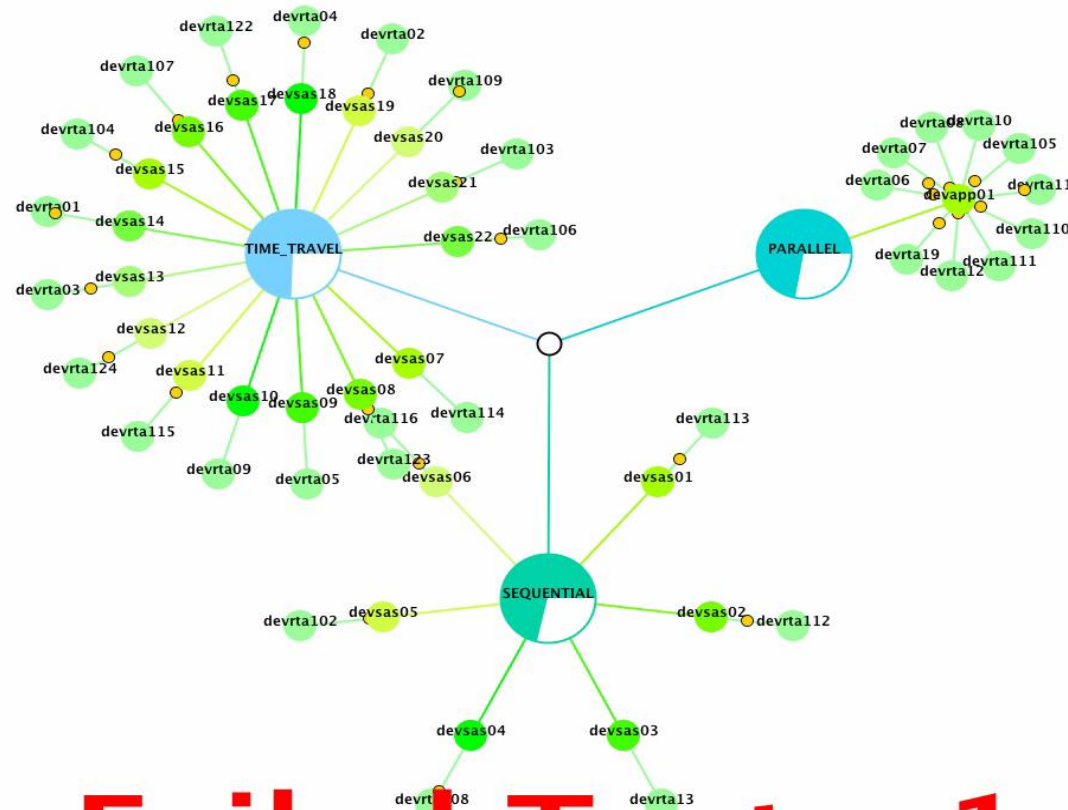


# Romero

Romero UI

Time remaining:

00:18:37



Failed Tests: 1

# Big Feedback

Build Status - Big Feedback

file:///Users/dave/Documents/Presentations/BigFeedback3.html

Apple Yahoo! Google Maps YouTube Wikipedia News (10) Popular

From: 26/10 To: 08/11 [Set Current Iteration](#)

## Iteration 77

**34552** stewarta  
 tfx [AndyS] #4839 Report all trades on Spot Metals to JPM and use correct counterparty when creating JPM trade reports  
 15 Ignored tests

Rev. 34551	08 Nov 12:14
Rev. 34550	08 Nov 11:59
Rev. 34549	08 Nov 11:33

[Set Embargo](#) [Set News](#) [Message](#)

**34552** analysis-db

Rev. 34551	08 Nov 12:24
Rev. 34550	08 Nov 12:09
Rev. 34549	08 Nov 11:44

Rev. 34551	08 Nov 12:24
Rev. 34550	08 Nov 12:09
Rev. 34549	08 Nov 11:44

**34551** acceptance

Rev. 34550	08 Nov 12:20
Rev. 34546	08 Nov 11:07
Rev. 34545	08 Nov 10:12

**34546** 40 Ignored tests  
 Romero Server

**34532** 15 Ignored tests  
 it77

Rev. 34531	07 Nov 17:49
Rev. 34524	07 Nov 15:59
Rev. 34520	07 Nov 14:13

**34532** it77-acceptance

Rev. 34531	07 Nov 18:16
Rev. 34524	07 Nov 16:22
Rev. 34520	07 Nov 14:47

**34532** it77-analysis

Rev. 34531	07 Nov 18:01
Rev. 34524	07 Nov 16:10
Rev. 34520	07 Nov 14:26

## Preview Environment (rev. 34479)

**34489** acceptancesoak

Rev. 34489	06 Nov 20:56
Rev. 34489	06 Nov 20:32
Rev. 34489	06 Nov 20:09

**34521** client-library-csharp

Rev. 34508	07 Nov 11:11
Rev. 34503	07 Nov 10:46
Rev. 34301	31 Oct 10:54

**34521** client-library-csharp-acceptance

Rev. 34521	08 Nov 10:19
Rev. 34521	08 Nov 09:34
Rev. 34521	08 Nov 08:25

**34248** commons

Rev. 34248	02 Nov 21:35
Rev. 34248	01 Nov 12:24
Rev. 34248	28 Oct 14:40

**33676** dsparams

Rev. 33676	20 Oct 21:29
Rev. 33676	20 Oct 20:14
Rev. 33676	20 Oct 20:12

# Big Feedback – Showing failures

Build Status – Big Feedback

http://devdisplay01.dev.tradefair:14080/

Apple Yahoo! Google Maps YouTube Wikipedia News (10) Popular

From: 26/10 To: 08/11 **Iteration 77** [Set Current Iteration](#)

34578	stewartatfx	[AndyS] Euthenasing ignored tests	15 ignored tests	Rev. 34577	08 Nov 17:15	
				Rev. 34575	08 Nov 16:48	
				Rev. 34573	08 Nov 16:35	

[Set Embargo](#) [Set News](#) [Message](#)

34577	analysis			34575	analysisfdb	8 Ignored tests	Rev. 34572	08 Nov 16:37
						<b>Failed before tests ran!</b>	Rev. 34558	08 Nov 14:17
							Rev. 34553	08 Nov 13:20

34573	acceptance						Rev. 34568	08 Nov 16:06
							Rev. 34560	08 Nov 15:18
							Rev. 34556	08 Nov 14:14

34573 76 Ignored tests

Romero Server **17 Failures:**

- sequential.api.margin.CurrencyMarginCalculationsForUsdAccountAcceptanceTest  
*shouldUseBuyRateForProfitAndLossAndBlendedRateForMarginWhenPositiveCashOffsetsLossesAndPartiallyOffsetsMargin*
- sequential.api.margin.CurrencyMarginCalculationsForEurAccountAcceptanceTest  
*shouldUseBuyRateForProfitAndLossAndBlendedRateForMarginWhenPositiveCashOffsetsLossesAndPartiallyOffsetsMargin*
- sequential.cfdx.ViewAccountProfitAndLossTakingIntoAccountInstrumentCurrencyAcceptanceTest  
*shouldRecalculateAccountProfitLossWhenAWalletBalanceOfACurrencyChangesWhereIHaveAPositionOnAnInstrumentPricedInThatCurrency*
- sequential.cfdx.ViewAccountProfitAndLossTakingIntoAccountInstrumentCurrencyAcceptanceTest  
*shouldUseFXBuyRateForPositiveWalletAvailableToTradeContribution*
- sequential.cfdx.ViewAccountProfitAndLossTakingIntoAccountInstrumentCurrencyAcceptanceTest  
*shouldRecalculateAccountProfitLossWhenAccountCashBalanceChanges*
- sequential.api.margin.CurrencyMarginCalculationsForGbpAccountAcceptanceTest  
*shouldUseBlendedRateForProfitAndLossAndSellRateForMarginWhenPositiveCashPartiallyOffsetsLossesButNotMargin*
- sequential.api.margin.CurrencyMarginCalculationsForGbpAccountAcceptanceTest  
*shouldSelectRatesToUseIndependentlyByCurrency*
- sequential.api.margin.CurrencyMarginCalculationsForGbpAccountAcceptanceTest  
*shouldUseBlendedRateForProfitAndLossAndMarginWhenProfitsOffsetNegativeCashAndPartiallyOffsetMargin*
- sequential.fix.tradereporting.LchTradeReportingAcceptanceTest  
*shouldRecordAcceptedAckFromClearingDestination*
- sequential.cfdx.DealTicketEstimatedMarginAcceptanceTest  
*shouldUpdateEstimatedMarginOnEachKeyPressInQuantityField*
- sequential.cfdx.DealTicketEstimatedMarginAcceptanceTest  
*shouldUpdateEstimatedMarginInAccountCurrencyWhenExchangeRatesChangeForMarketOrder*
- sequential.cfdx.DealTicketEstimatedMarginAcceptanceTest  
*shouldUpdateEstimatedMarginValuesAndEstimatedNotionalValueWhenValuationPricesChangeForMarketOrder*
- sequential.api.ApplyFXRatesToWalletWhenRealisingProfitAcceptanceTest

**System Alert** Nerts! The last Romero Server build with fewer than 10 failures was 34568.

# AutoTrish

AutoTrish - Big Feedback

devdisplay01.dev.lmax/autotrish.html

Google Mail CruiseControl.rb Big Feedback Google Maps Movies Slashdot DailyTech TradeFair Mail Intranet TFX - Trac Other Bookmarks

## AutoTrish™

By Rank By Flavour By Error Message

timetravel.DownloadAccountTransactionsTimeTravelAcceptanceTest.shouldIncludeTransactionsInLast24HoursForPrevious24HoursDownload  
25345 25348 25351 25356 25357 Pass: 0.00 Intermittent: 0.25 TrishRank™: 🍌 🍌 🍌 🍌

timetravel.InstrumentListTradedPricesOnCloseOrSuspendAcceptanceTest.shouldDisplayTradedPricesForGoodUntilCancelledOrderOnClose  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.07 Intermittent: 0.33 TrishRank™: 🍌 🍌 🍌  
*I suspect rev. 25341-25345: gravesd, hounslowd, barnesm, smithc, No twix for you.*

timetravel.FxSweepUsesCorrectDaysRateForSafeguardDefect3467AcceptanceTest.shouldUseTheCorrectDaysRatesForSafeguard  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.08 Intermittent: 0.11 TrishRank™: 🍌 🍌 🍌  
*I suspect rev. 25341-25345: gravesd, hounslowd, barnesm, smithc, A greener build contributes to a greener environment*

timetravel.InitiateFundingRunForPositionsOverMultipleDaysOnNonFxInstrumentAcceptanceTest.shouldApplyNonFxFundingOnLatestSnapshot  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.08 Intermittent: 0.11 TrishRank™: 🍌 🍌 🍌  
*I suspect rev. 25341-25345: gravesd, hounslowd, barnesm, smithc, Fix is not just a protocol name.*

timetravel.InstrumentListTradedPricesOnCloseOrSuspendAcceptanceTest.shouldDisplayTradedPricesOnSuspension  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.08 Intermittent: 0.11 TrishRank™: 🍌 🍌 🍌  
*I suspect rev. 25341-25345: gravesd, hounslowd, barnesm, smithc, OK. Lets fix this.*

timetravel.ScheduleWalletSnapshotAcceptanceTest.shouldSnapshotWalletsEveryDayAtSpecificSnapshotTime  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.08 Intermittent: 0.11 TrishRank™: 🍌 🍌 🍌  
*I suspect rev. 25341-25345: gravesd, hounslowd, barnesm, smithc, Make it go green*

timetravel.UseMarketClosePriceAsValuationInSnapshotAcceptanceTest.shouldUseAverageOfUpToOneHundredBidAndAskPricesPlacedInFiveMinutesUpToClose  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.08 Intermittent: 0.11 TrishRank™: 🍌 🍌 🍌  
*I suspect rev. 25341-25345: gravesd, hounslowd, barnesm, smithc, A greener build contributes to a greener environment*

timetravel.EncumberedFundsReportTimeTravelAcceptanceTest.shouldReportDebtWhenLiquidatedAndOverExposed  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.43 Intermittent: 0.44 TrishRank™: 🍌

timetravel.DownloadOrderHistoryTimeTravelAcceptanceTest.shouldNotIncludeOrderPlacedOver30DaysAgoInLast30DaysDownload  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.36 Intermittent: 0.33  
*I suspect rev. 25356: barkerm, Fix is not just a protocol name.*

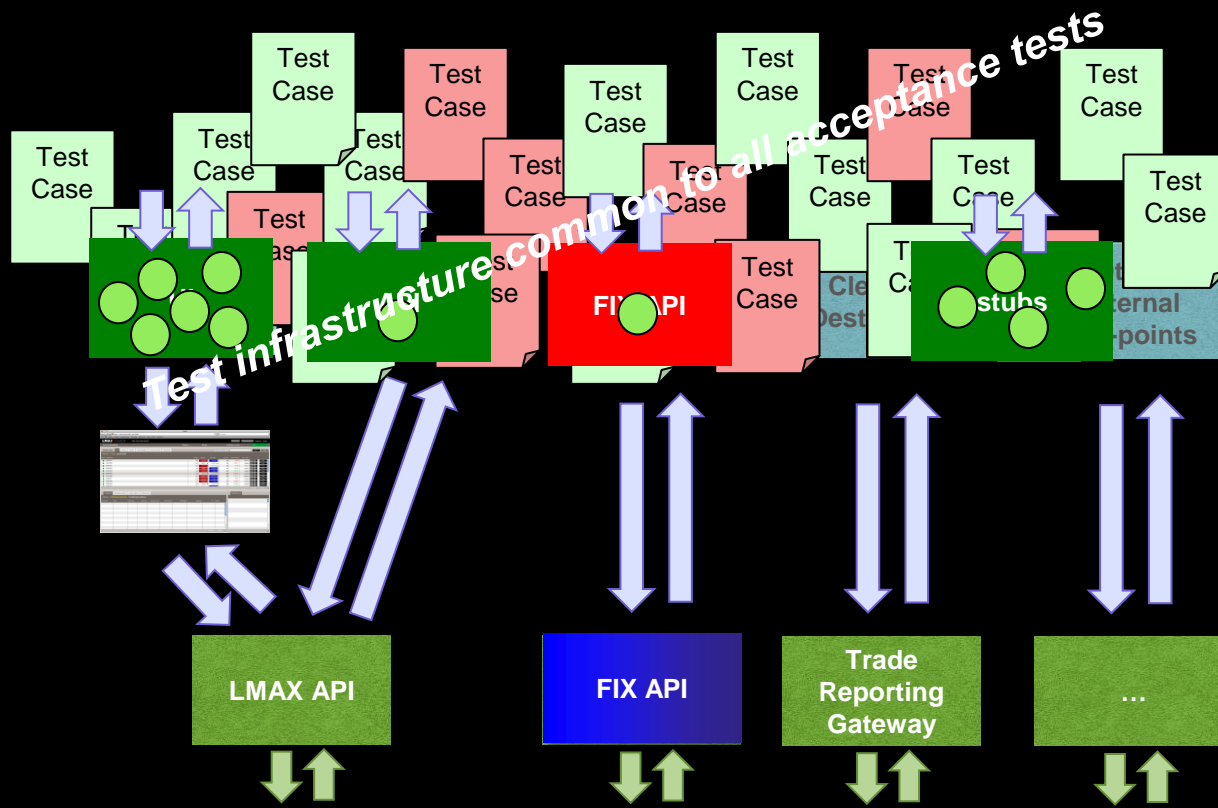
timetravel.EncumberedFundsReportTimeTravelAcceptanceTest.shouldReportDisaggregatedUnrealisedProfitAndLoss  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.46 Intermittent: 0.44 TrishRank™: 🍌

timetravel.EncumberedFundsReportTimeTravelAcceptanceTest.shouldReportFxFundingAndHaircutSeparately  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.46 Intermittent: 0.44 TrishRank™: 🍌

timetravel.EncumberedFundsReportTimeTravelAcceptanceTest.shouldReportOpeningAndClosingBalancesForClosingAccountsWithoutTradingActivity  
25330 25334 25335 25338 25340 25345 25348 25351 25356 25357 Pass: 0.46 Intermittent: 0.44 TrishRank™: 🍌

timetravel.EncumberedFundsReportTimeTravelAcceptanceTest.shouldReportPreAndPostCloseEquityAndDebtOnSomeTradingDay

# Acceptance Testing





# Acceptance Testing – DSL

@Test

```
public void shouldSupportPlacingValidBuyAndSellLimitOrders()
{
    tradingUI.showDealTicket("instrument");
    tradingUI.dealTicket.placeOrder("type: limit", "bid: 4@10");
    tradingUI.dealTicket.checkFeedbackMessage("You have successfully sent a limit order to buy 4.00 contracts at 10.0");
    tradingUI.dealTicket.dismissFeedbackMessage();

    tradingUI.dealTicket.placeOrder("type: limit", "ask: 4@9");
    tradingUI.dealTicket.checkFeedbackMessage("You have successfully sent a limit order to sell 4.00 contracts at 9.0");
}
```

@Test

```
public void shouldSuccessfullyPlaceAnImmediateOrCancelBuyMarketOrder()
{
    fixAPIMarketMaker.placeMassOrder("instrument", "ask: 11@52", "ask: 10@51", "ask: 10@50", "bid: 10@49");

    fixAPI.placeOrder("instrument", "side: buy", "quantity: 4", "goodUntil: Immediate", "allowUnmatched: true");
    fixAPI.waitForExecutionReport("executionType: Fill", "orderStatus: Filled",
        "side: buy", "quantity: 4", "matched: 4", "remaining: 0",
        "executionPrice: 50", "executionQuantity: 4");
}
```

@Before

```
public void beforeEveryTest()
{
    adminAPI.createInstrument("name: instrument");
    registrationAPI.createUser("user");
    registrationAPI.createUser("marketMaker", "accountType: MARKET_MAKER");
    tradingUI.loginAsLive("user");
}
```

# Acceptance Testing – DSL

```
public void placeOrder(final String... args)
{
    final DslParams params =
        new DslParams(args,
            new OptionalParam("type").setDefault("Limit").setAllowedValues("limit", "market", "StopMarket"),
            new OptionalParam("side").setDefault("Buy").setAllowedValues("buy", "sell"),
            new OptionalParam("price"),
            new OptionalParam("triggerPrice"),
            new OptionalParam("quantity"),
            new OptionalParam("stopProfitOffset"),
            new OptionalParam("stopLossOffset"),
            new OptionalParam("confirmFeedback").setDefault("true"));

    getDealTicketPageDriver().placeOrder(params.value("type"),
        params.value("side"),
        params.value("price"),
        params.value("triggerPrice"),
        params.value("quantity"),
        params.value("stopProfitOffset"),
        params.value("stopLossOffset"));

    if (params.valueAsBoolean("confirmFeedback"))
    {
        getDealTicketPageDriver().clickOrderFeedbackConfirmationButton();
    }

    LOGGER.debug("placeOrder(" + Arrays.deepToString(args) + ")");
}
```

# Acceptance Testing – DSL

```
public void placeOrder(final String... args)
{
    final DslParams params = new DslParams(args,
        new RequiredParam("instrument"),
        new OptionalParam("clientId"),
        new OptionalParam("order"),
        new OptionalParam("side").setAllowedValues("buy", "sell"),
        new OptionalParam("orderType").setAllowedValues("market", "limit"),
        new OptionalParam("price"),
        new OptionalParam("bid"),
        new OptionalParam("ask"),
        new OptionalParam("symbol").setDefault("BARC"),
        new OptionalParam("quantity"),
        new OptionalParam("goodUntil").setAllowedValues("Immediate", "Cancelled").setDefault("Cancelled"),
        new OptionalParam("allowUnmatched").setAllowedValues("true", "false").setDefault("true"),
        new OptionalParam("possibleResend").setAllowedValues("true", "false").setDefault("false"),
        new OptionalParam("unauthorised").setAllowedValues("true"),
        new OptionalParam("brokeredAccountId"),
        new OptionalParam("msgSeqNum"),
        new OptionalParam("orderCapacity").setAllowedValues("AGENCY", "PRINCIPAL", "").setDefault("PRINCIPAL"),
        new OptionalParam("accountType").setAllowedValues("CUSTOMER", "HOUSE", "").setDefault("HOUSE"),
        new OptionalParam("accountClearingReference"),
        new OptionalParam("expectedOrderRejectionStatus").
            setAllowedValues("TOO_LATE_TO_ENTER", "BROKER_EXCHANGE_OPTION", "UNKNOWN_SYMBOL", "DUPLICATE_ORDER"),
        new OptionalParam("expectedOrderRejectionReason").setAllowedValues("INSUFFICIENT_LIQUIDITY", "INSTRUMENT_NOT_OPEN",
            "INSTRUMENT_DOES_NOT_EXIST", "DUPLICATE_ORDER",
            "QUANTITY_NOT_VALID", "PRICE_NOT_VALID", "INVALID_ORDER_INSTRUCTION",
            "OUTSIDE_VOLATILITY_BAND", "INVALID_INSTRUMENT_SYMBOL",
            "ACCESS_DENIED", "INSTRUMENT_SUSPENDED"),
        new OptionalParam("expectedSessionRejectionReason").setAllowedValues("INVALID_TAG_NUMBER", "REQUIRED_TAG_MISSING",
            "TAG_NOT_DEFINED_FOR_THIS_MESSAGE_TYPE",
            "UNDEFINED_TAG", "TAG_SPECIFIED_WITHOUT_A_VALUE",
            "VALUE_IS_INCORRECT_FOR_THIS_TAG", "INCORRECT_DATA_FORMAT_FOR_VALUE",
            "DECRYPTION_PROBLEM", "SIGNATURE_PROBLEM",
            "COMPID_PROBLEM", "SENDING_TIME_ACCURACY_PROBLEM",
            "INVALID_MSG_TYPE"),
        new OptionalParam("idSource").setDefault(EXCHANGE_SYMBOL_ID_SOURCE));
```

# Acceptance Testing – DSL

```
@Test
public void shouldSupportPlacingValidBuyAndSellLimitOrders()
{
    tradingUI.showDealTicket("instrument");
    tradingUI.dealTicket.placeOrder("type: limit", "bid: 4@10");
    tradingUI.dealTicket.checkFeedbackMessage("You have successfully sent a limit order to buy 4.00 contracts at 10.0");
    tradingUI.dealTicket.dismissFeedbackMessage();
}

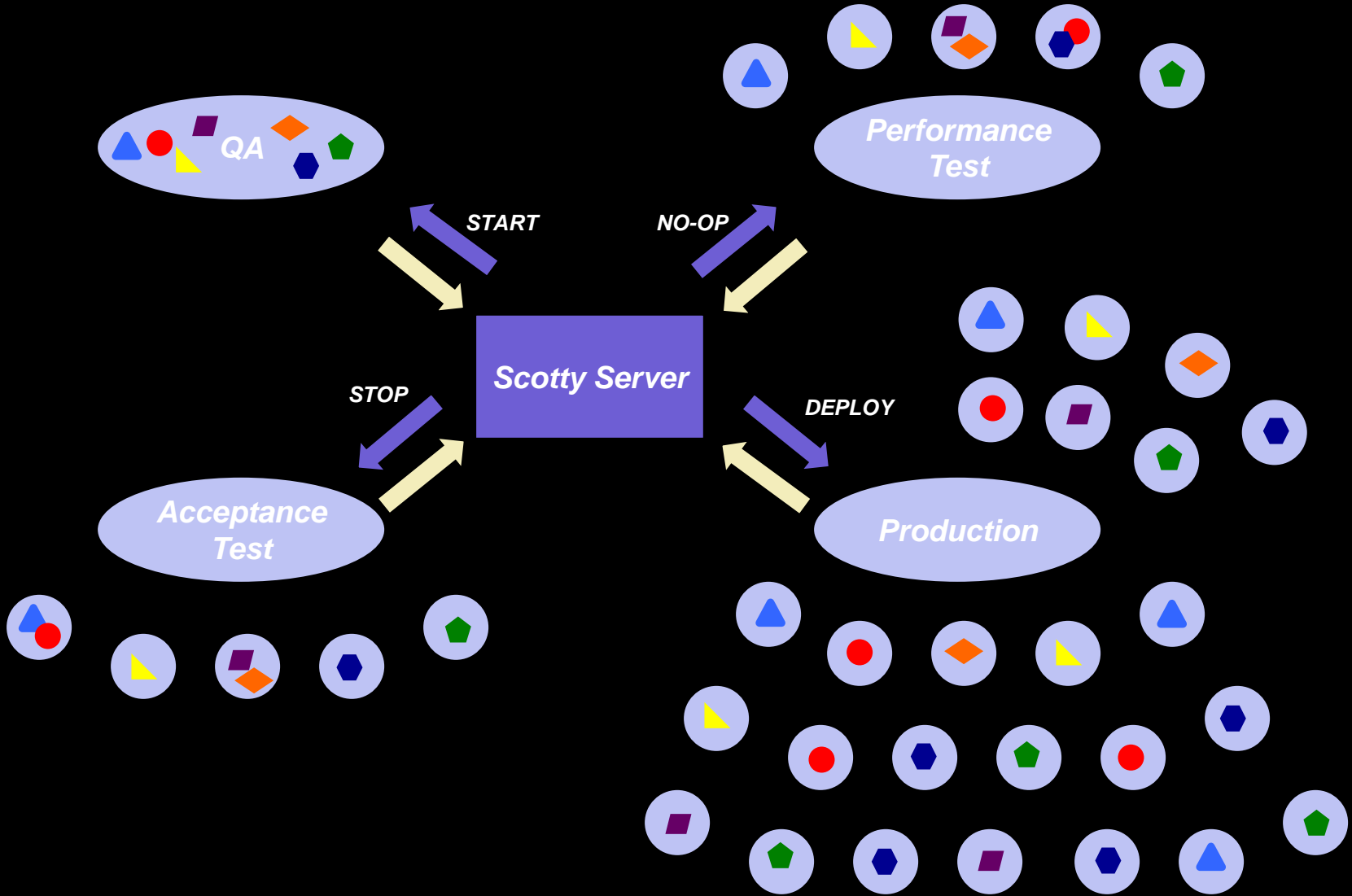
@Test
public void shouldSuccessfullyPlaceAnImmediateOrCancelBuyMarketOrder()
{
    tradingUI.dealTicket.checkFeedbackMessage("You have successfully sent a limit order to sell 4.00 contracts at 9.0");
    trading.placeOrder("instrument", "side: buy", "price: 123.45", "quantity: 4", "goodUntil: Immediate");
}

@Test
public void shouldSuccessfullyPlaceAnImmediateOrCancelBuyMarketOrder()
{
    fixPIMarketMaker.placeMassOrder("instrument", "side: buy", "price: 123.45", "quantity: 4", "goodUntil: Immediate");
    fixAPI.placeOrder("instrument", "side: buy", "quantity: 4", "goodUntil: Immediate", "allowUnmatched: true");
    fixAPI.waitForExecutionReport("executionType: Fill", "orderStatus: Filled",
        "side: buy", "quantity: 4", "matched: 4", "remaining: 0",
        "executionPrice: 50", "executionQuantity: 4");
}
}
```

# Acceptance Testing – Simple DSL

- Now Open Source...
  - <https://code.google.com/p/simple-dsl/>

# Scotty



# Scotty – Performing a release

Scotty Status

http://tfdeploy01.dev.tradefair/scotty/revisions\_deploy.html?env=devqas106

devqas106

Actions:

Revision	Branch	Approvals	Revision Actions	
34579	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34578	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34577	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34576	it77	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34575	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34573	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34572	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34571	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34570	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34568	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34565	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34563	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34561	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34560	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>
34559	trunk	OPERATIONS (0/1) , FUNCTIONAL_TEST (0/3)	<input type="text" value="Upgrade"/>	<input type="button" value="Do it"/>

# Scotty – Environment Detail

Scotty cpf Status

http://tfdeploy01.dev.tradefair/scotty/env.html?env=cpf

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Summary	IDLE	WORKING	COMPLETED	FAILED
NO_OP	15	0	0	0

Environments Stop Auto-Refresh

cpf Deployment Environment Actions (rev. 34579):  Do it Reset Env

Dashboard Details

Host	Command	UA Status	Installed Revision	Role	Health	Last Check-in (UTC)	Host Action
cpfacs01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	account-svc	account-svc: Server: OK, PRIMARY	2011-11-08 18:11:18	<input type="text"/> Do it
cpfadb01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	database-adb-live	database: OK	2011-11-08 18:11:13	<input type="text"/> Do it
cpfcsh01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	web-admin	web-admin: Server: OK, PRIMARY	2011-11-08 18:11:15	<input type="text"/> Do it
cpfcsv01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	contact-svc	contact-svc: Server: OK, PRIMARY	2011-11-08 18:11:18	<input type="text"/> Do it
cpflns01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	instrument-svc	instrument-svc: Server: OK, PRIMARY	2011-11-08 18:11:17	<input type="text"/> Do it
cpfpgw01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	payment-gateway	payment-gateway: Server: OK, PRIMARY	2011-11-08 18:11:12	<input type="text"/> Do it
cpfpsv01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	payment-svc	payment-svc: Server: OK, PRIMARY	2011-11-08 18:11:15	<input type="text"/> Do it
cpfrs01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	broker-fix-trading-gateway	broker-fix-trading-gateway: Server: OK, PRIMARY	2011-11-08 18:11:22	<input type="text"/> Do it
cpfwb01.dev.tradefair scotty build 32756	NO_OP	IDLE Zzzz...	34579	database-wdb-live	database-logging: OK	2011-11-08 18:11:19	<input type="text"/> Do it
pf1ems01.dev.tradefair scotty build 32756	NO_OP	IDLE PROMOTING_AS_CONFIGURED	34579	ems1	ems1: Server: OK, PRIMARY	2011-11-08 18:11:17	<input type="text"/> Do it
pf1ems02.dev.tradefair scotty build 32756	NO_OP	IDLE PROMOTING_AS_CONFIGURED	34579	ems2	ems2: Server: OK, SECONDARY	2011-11-08 18:11:18	<input type="text"/> Do it
pf1evs01.dev.tradefair scotty build 32756	NO_OP	IDLE PROMOTING_AS_CONFIGURED	34579	ev1	ev1: Server: OK, PRIMARY	2011-11-08 18:11:17	<input type="text"/> Do it
pf1evs02.dev.tradefair scotty build 32756	NO_OP	IDLE PROMOTING_AS_CONFIGURED	34579	ev2	ev2: Server: OK, SECONDARY	2011-11-08 18:11:22	<input type="text"/> Do it



# Scotty – Single Server Environment

Scotty qas104 Status

http://tfdeploy01.dev.tradefair/scotty/env.html?env=qas104

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Summary	IDLE	WORKING	COMPLETED	FAILED
NO_OP	1	0	0	0

Environments Stop Auto-Refresh

qas104 Deployment Environment Actions (rev. 34555):  Do it Reset Env

Dashboard Details

Host	Command	UA Status	Installed Revision	Role	Health	Last Check-in (UTC)	Host Action
devqas104.dev.tradefair scotty build 32756	NO_OP	IDLE PROMOTING_AS_CONFIGURED	34555	all-primaries-except-market-monitoring	account-svc: Server: OK, PRIMARY broker-fix-trading-gateway: Server: OK, PRIMARY contact-svc: Server: OK, PRIMARY data-export: Server: OK, PRIMARY database: OK ems1: Server: OK, PRIMARY_AT_RISK ev1: Server: OK, PRIMARY_AT_RISK fix-gateway: Server: OK, PRIMARY fix-trade-reporting-gateway: Server: OK, PRIMARY identity-check-gateway: Server: OK, PRIMARY instrument-svc: Server: OK, PRIMARY market-data-svc: Server: OK, PRIMARY mmbot: Server: OK, PRIMARY payment-gateway: Server: OK, PRIMARY payment-svc: Server: OK, PRIMARY registration-gateway: Server: OK, PRIMARY stub-ftp-server: OK (NO OP) treasury-svc: Server: OK, PRIMARY trs: Server: OK, PRIMARY web-admin: Server: OK, PRIMARY web-latencyMonitor: OK: Server returned HTTP 200 web-public: Server: OK, PRIMARY web-stub: Server: OK, PRIMARY	2011-11-08 18:12:44	<input type="text" value="-----"/> Do it

>> Show History

# Wrap up Q & A

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