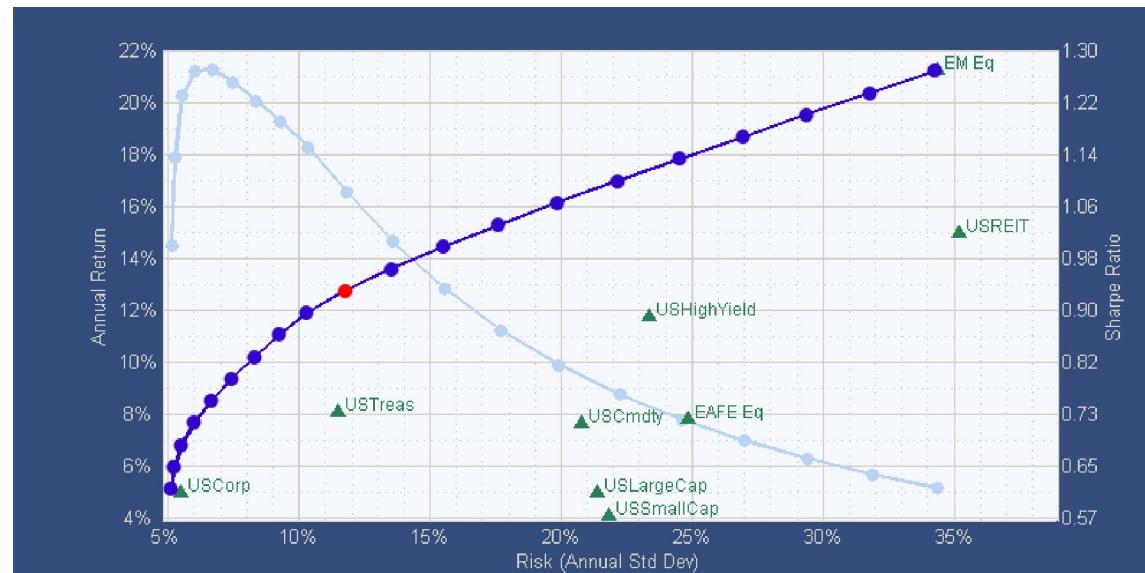




# Quantitative Portfolio Management

WWW aplikace pro správu portfolií implementovaná pomocí nástroje MATLAB Production Server



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# Overview

- Start Page:

Firefox http://192.168.1.10:8080/WebAssetAlloc/assetAllocStart.html

192.168.1.10:8080/WebAssetAlloc/assetAllocStart.html

Portfolio Management Home

## Asset Allocation Parameters

**Asset Classes**

**ASSET CLASSES AND LIMITS**

Asset Class	Allowable Limits		Initial Allocation	Asset Class Statistics		
Include	Min	Max		Return	Std Dev	99% VaR
<input checked="" type="checkbox"/> US Large Cap		100		5.00	21.37	44.84
<input checked="" type="checkbox"/> US Small Cap		100		4.11	21.80	46.66
<input checked="" type="checkbox"/> US Corp. Bond		100		4.98	5.49	7.81
<input checked="" type="checkbox"/> US HY Bond		100		11.76	23.35	42.16
<input checked="" type="checkbox"/> EAFE Equity		100		7.80	24.82	50.00
<input checked="" type="checkbox"/> EM Equity		100		21.24	34.36	58.70
<input checked="" type="checkbox"/> US Treasury		100		8.11	11.49	18.60
<input checked="" type="checkbox"/> US REIT		100		14.99	35.17	67.15
<input checked="" type="checkbox"/> US Commodity		100		7.64	20.75	40.27

**Asset Class Statistics**

**STATISTIC VISUALS**

Click on either image for a larger view

**RISK-FREE ASSET**

Include risk-free (cash) asset

Annual risk-free cash rate  %

Minimum allocation  %

Maximum allocation  %

**RISK PROXY**

Standard Deviation

CVaR at  % confidence

**TURNOVER**

Limit turnover to  % of initial portfolio

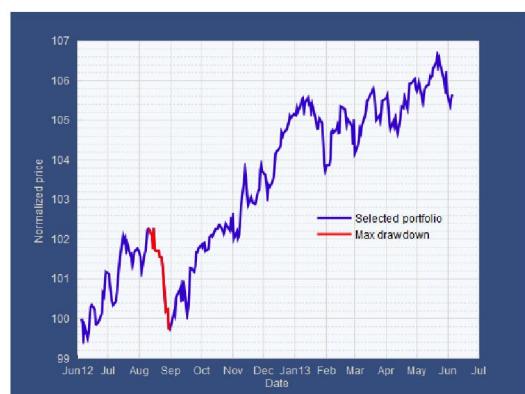
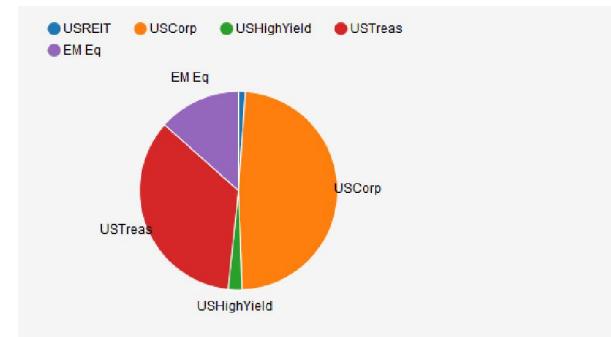
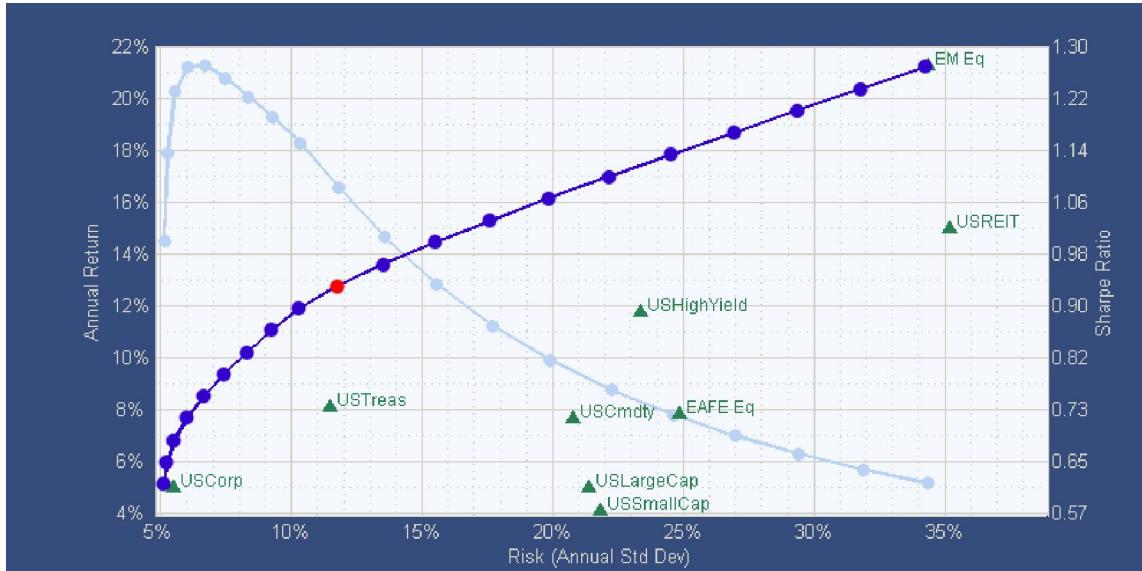
**Optimize Allocation**

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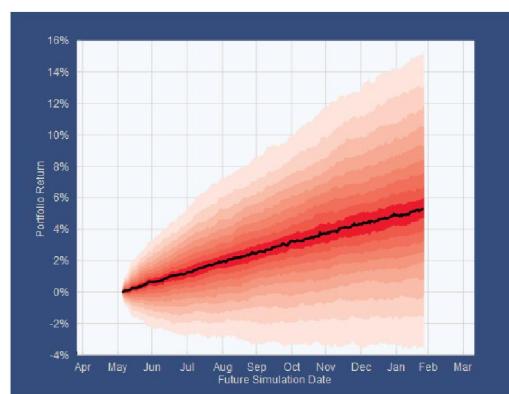


# Overview

- Results (Interactive):



Historical performance of the chosen portfolio and, if specified, the initial portfolio over the past year. The maximum drawdown period is highlighted and its value shown above.

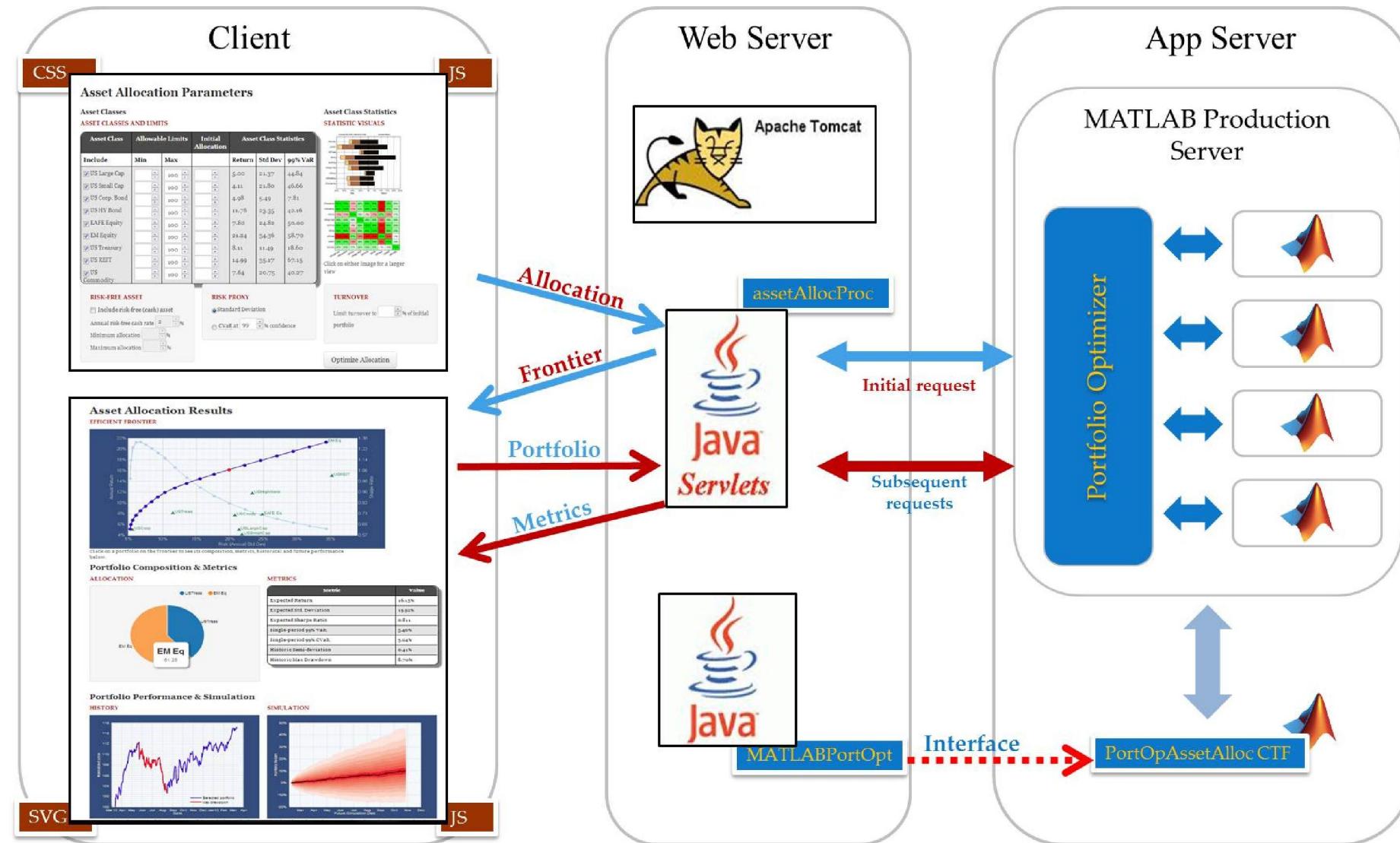


This fan chart shows the percentiles of simulated returns for the portfolio. The dark line denotes the mean and each shaded bar a 10% percentile of probability.

Metric	Value
Expected Return	8.52%
Expected Std. Deviation	6.70%
Expected Sharpe Ratio	1.273
Single-period 99% VaR	1.09%
Single-period 99% CVaR	1.55%
Historic Semi-deviation	0.20%
Historic Max Drawdown	3.00%



# Workflow





# Usage

- **Connect to WiFi Network:** **Humusoft-MPS**
  - No Security, no routing to Internet
- **In a Web Browser, go to:** **192.168.1.10**
  - or use the QR code:
  - HTML5 compatible
- **Fill-in the form (optionally)**
- **Press “Optimize Allocation”**
- **Result Page:**
  - Efficient Frontier and Pie Chart graphs are interactive, other elements get re-calculated after clicking on a portfolio.





# Prize Draw

- After the break (15:30...)
- $a = \text{randperm}(x) \dots$
- Winner:
  - IP address of winner's mobile device is the “ $a(1)$ -th” in the WiFi Router DHCP allocation table
    - Organizer's machines excluded from the draw, winner is the next in the permutation order
  - Winner shows the application screen

