

DYNATRACE

od pilotu do produkcie a ďalej...

26.10.2022



VÚB BANKA

Bank of INTESA  SANPAOLO

Agenda

- ⇒ Prolog
- ⇒ Pilot
- ⇒ Život s pilotom
- ⇒ Produkcia
- ⇒ Budúcnosť

Prolog

Ako si žijeme

Top 3 Banka

- 1.200.000 klientov
- Člen národnej korporácie
- cca. 2500 serverov
- 1000 služieb
- 5 prostredí

„Neexistuje žiadny nevinný. Existujú len rôzne stupne zodpovednosti.“

— Stieg Larsson

Pilot

➤ Zistiť čo produkt dokáže

➤ Overiť funkčnosť skrz technologický rez

- ➔ AIX, Linux, Windows
- ➔ Java, C#, MQ
- ➔ Oracle DB, MSSQL
- ➔ IBM ESB, IBM ACE

➤ Rozsah

- ➔ Zoznam cca. 15 serverov
- ➔ 0 dodaných informácií

Obete

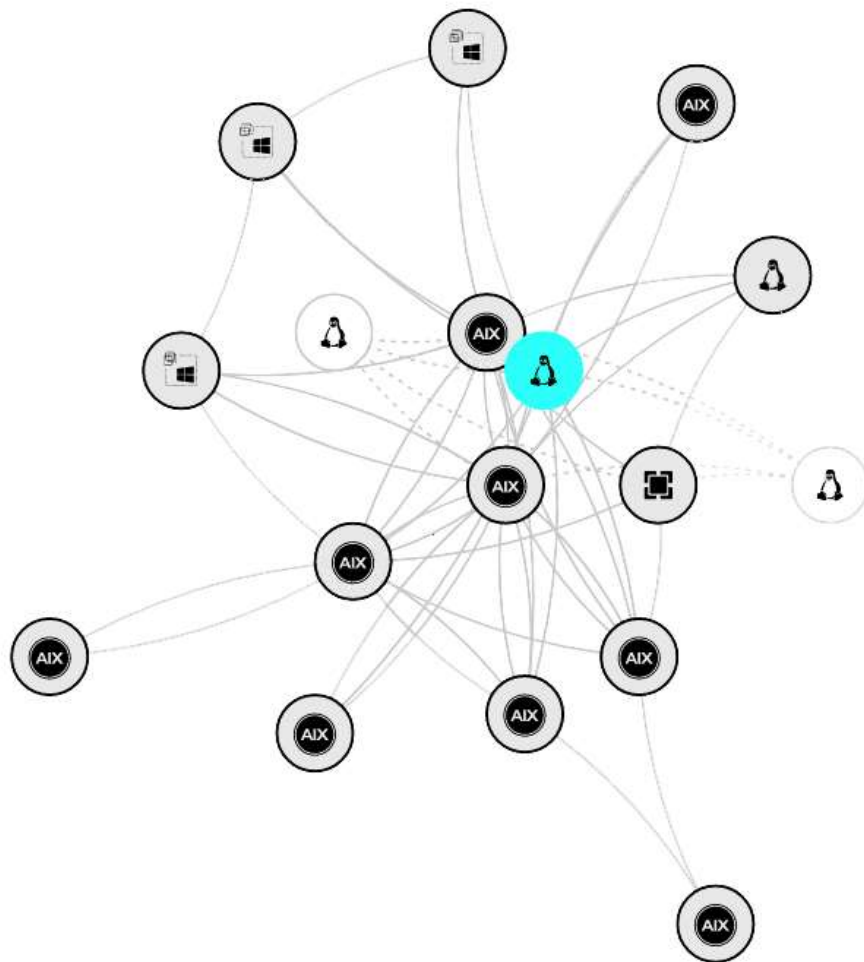
UAT prostredie

- Internet Banking
- Mobile Banking
- Integrovaná platforma
- Transakčná databáza
- MQ, DB2
- Security technológie

Produkčné prostredie

- Internet Banking
- Mobile Banking
- Integrovaná platforma
- Transakčná databáza
- MQ, DB2
- Security technológie

PREPOJENIE SERVEROV



Keep It Simple and Stupid.
— US Navy

**STRET S REALITOU
PREPOJENIA
SLUZIEB**



Pilotné fungovanie

- Existujúce paralelné fungovanie pôvodného monitoringu a Dynatrace
- Malá skupinka nadšencov
- Podpora manažmentu
- Prvé úspechy

Úspechy

„Keby som mal hodinu na vyriešenie problému, strávil by som 55 minút premýšľaním o probléme a 5 minút premýšľaním o jeho riešení.“

— Albert Einstein

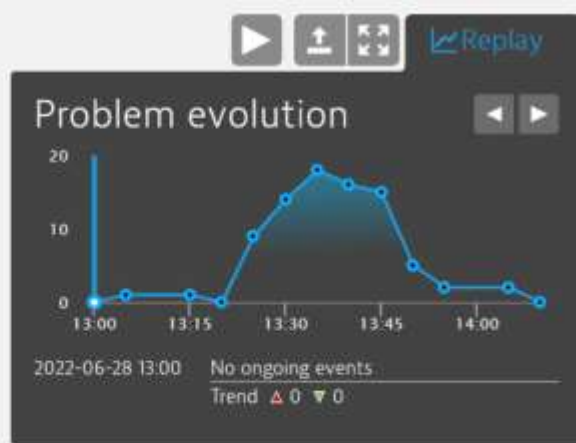
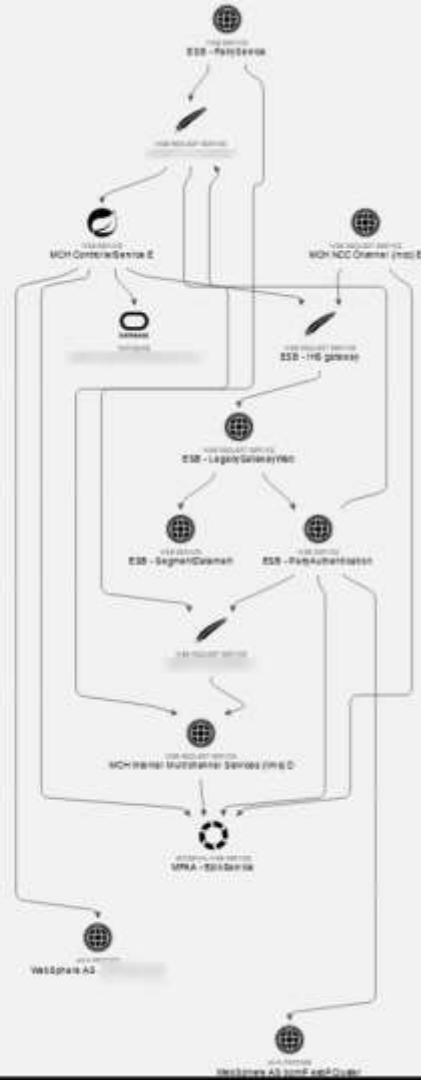
➤ Predikcia problémov

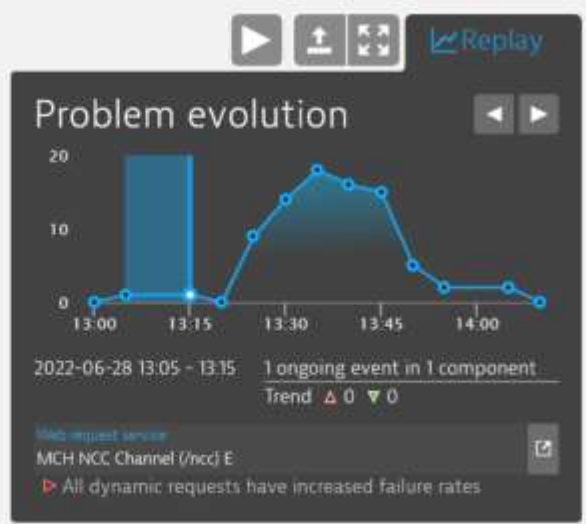
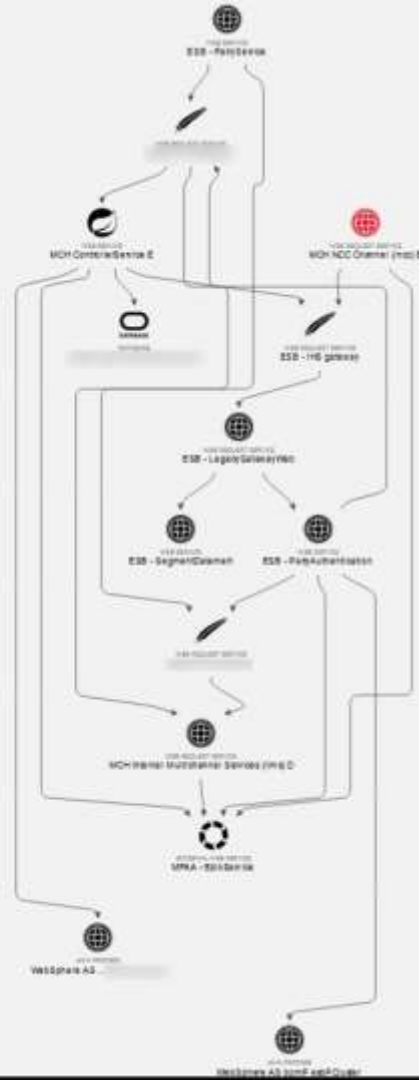
➤ Skrátené hľadania problémov

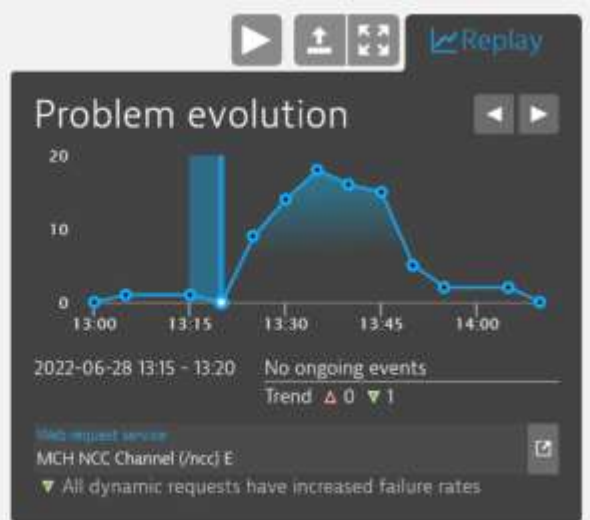
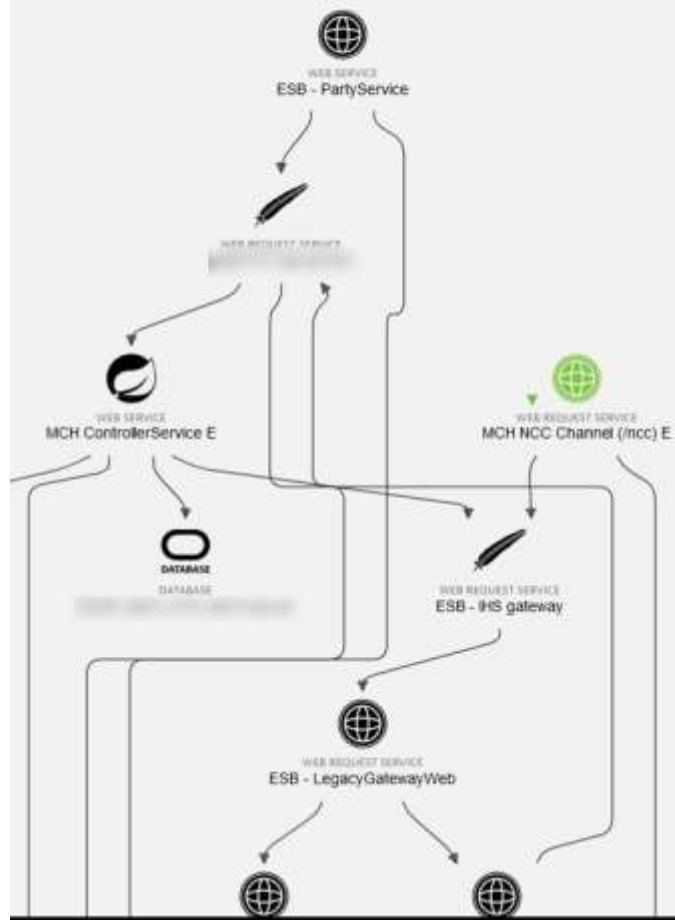
→ Po starom 3-5 hodín

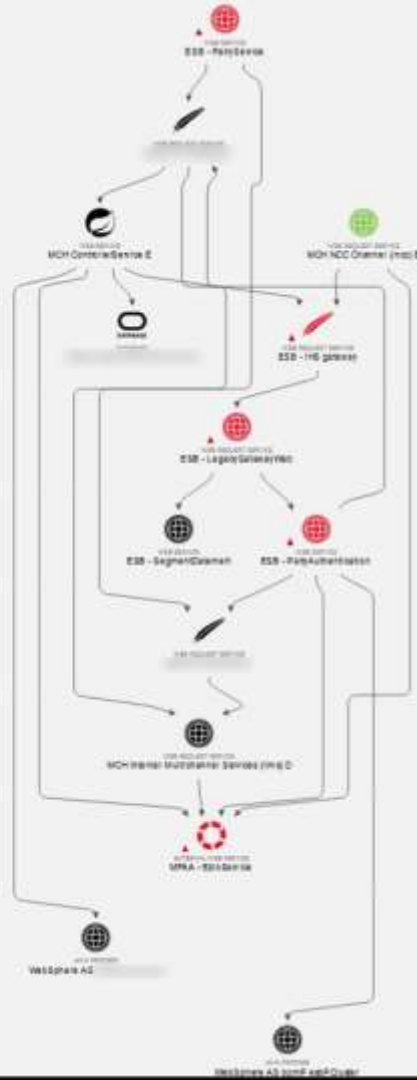
→ S Dynatrace 30 minút

→ Nie analýza ale **Time to Repair**

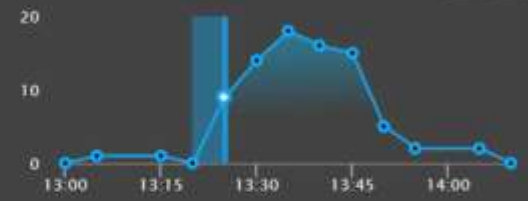






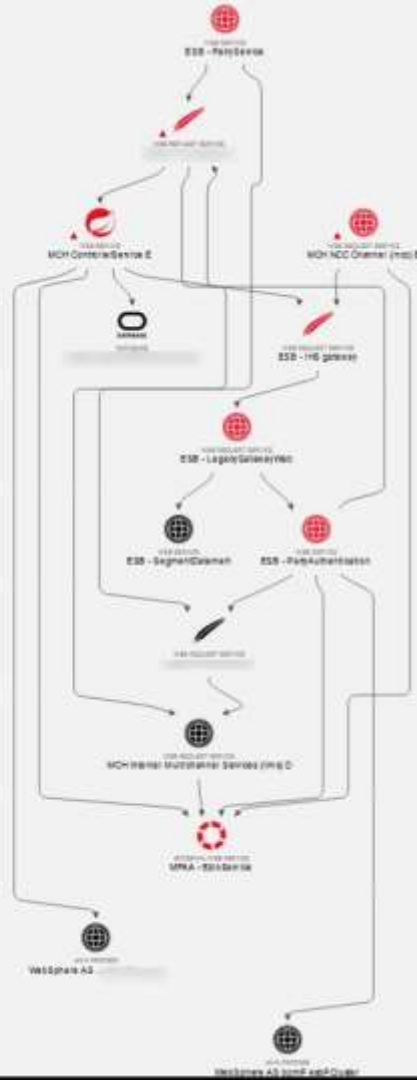


Problem evolution

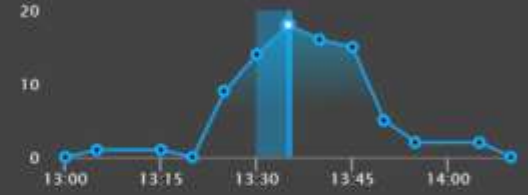


2022-06-28 13:20 - 13:25 9 ongoing events in 5 components
 Trend ▲ 9 ▼ 0

- External web service
 MFAA - EzioService
▲ Service MFAA - EzioService has failure rate increase
▲ Service method http://namespace.vub.sk/MFAA/1_0/IEzi...
▲ Service method <operation name unavailable> has fail...
- Web request service
 ESB - IHS gateway
▲ Service method /esblegacy/sca/gateway has failure rate...
- Web request service
 ESB - LegacyGatewayWeb
▲ Service method /esblegacy/sca/gateway has failure rate...
▲ All dynamic requests have increased failure rates
- Web service
 ESB - PartyAuthentication
▲ Service method generateChallenge has failure rate incre...
- Web service
 ESB - PartyService
▲ Service method checkNonstopBanking has failure rate i...
▲ Service ESB - PartyService has failure rate increase

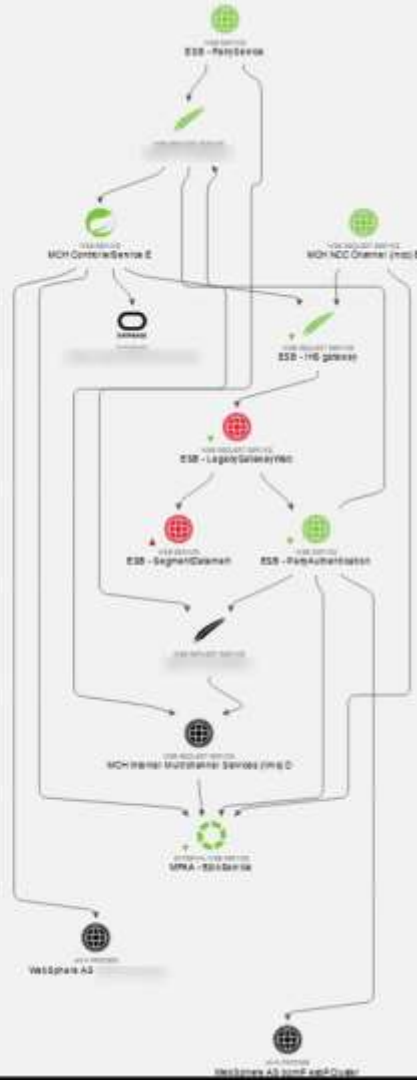


Problem evolution

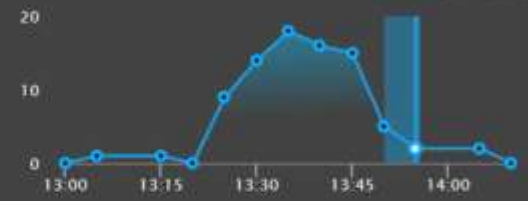


2022-06-28 13:30 - 13:35
 18 ongoing events in 8 components
 Trend: ▲ 4 ▼ 0

- External web service**
 - MFAA - EzioService
 - ▶ Service MFAA - EzioService has failure rate increase
 - ▶ Service method http://namespace.vub.sk/MFAA/t_0/IEzi...
 - ▶ Service method <operation name unavailable> has fail...
 - ▶ Service method http://namespace.vub.sk/MFAA/t_0/IEzi...
- Web request service**
 - ESB - IHS gateway
 - ▶ Service method /esblegacy/sca/gateway has failure rate...
- Web request service**
 - ESB - LegacyGatewayWeb
 - ▶ Service method /esblegacy/sca/gateway has failure rate...
 - ▶ All dynamic requests have increased failure rates
- Web request service**
 - MCH NCC Channel (/ncc) E
 - ▶ All dynamic requests have increased failure rates
- Web request service**
 - pxa01111.vub.sk:443
 - ▶ Service method /ncc/api/controller has failure rate incre...
- Web service**

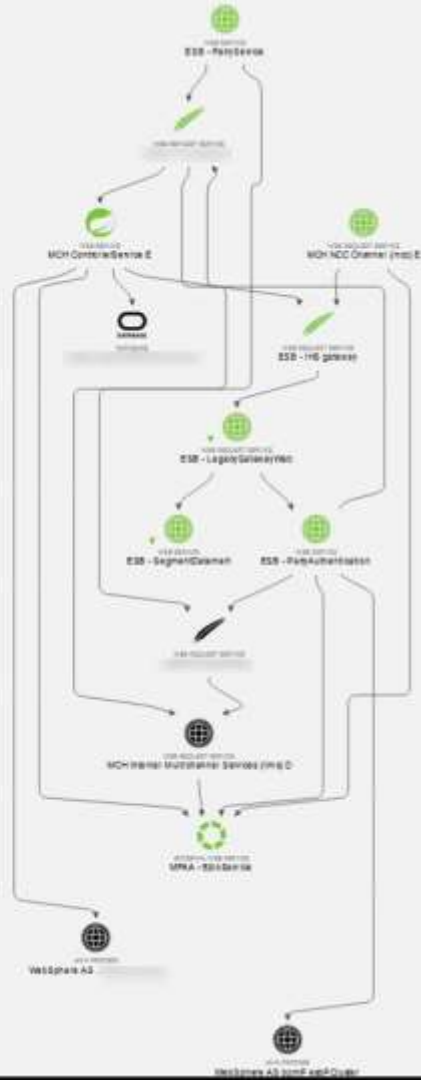


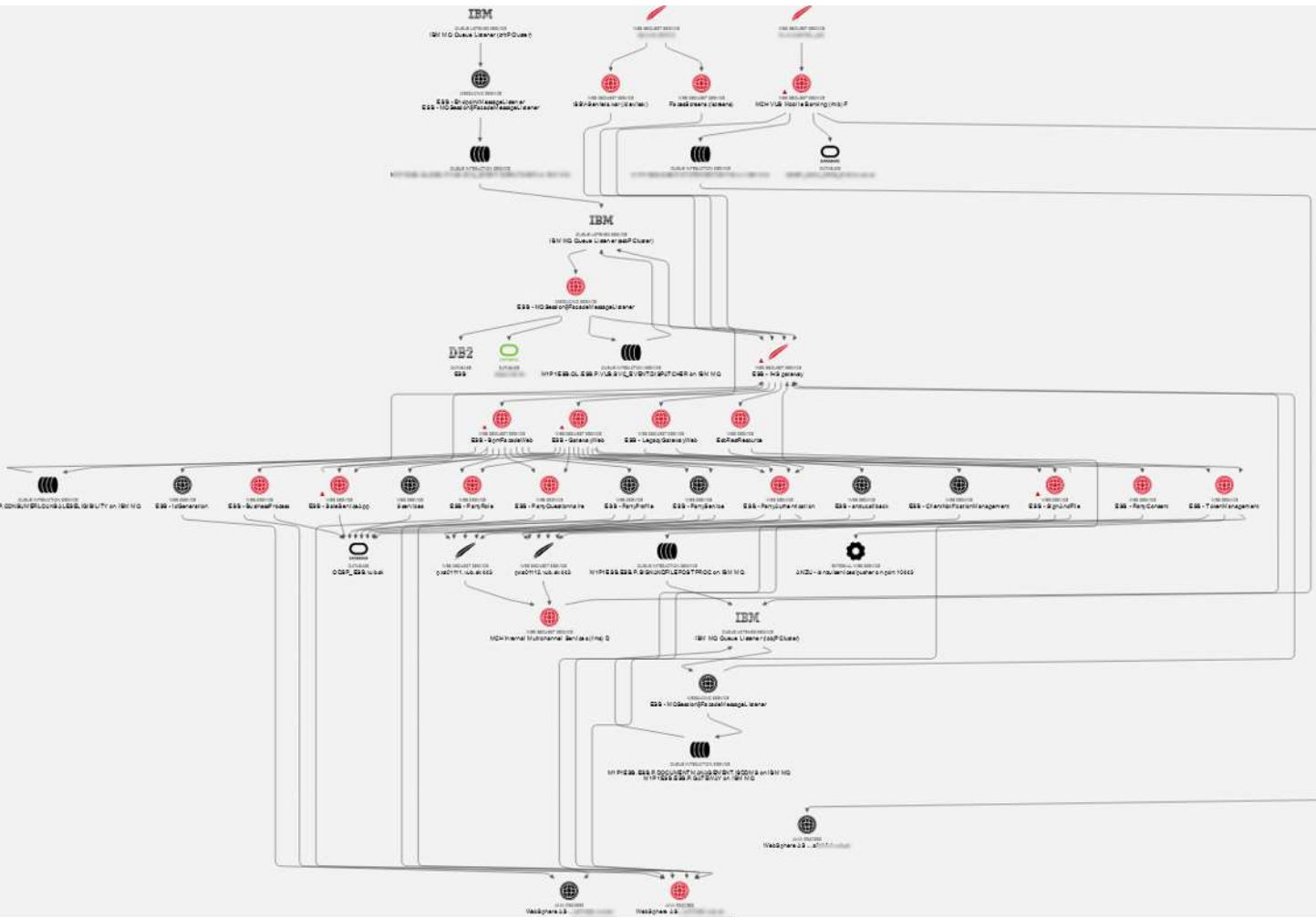
Problem evolution



2022-06-28 13:50 - 13:55 2 ongoing events in 1 component
 Trend ▲ 2 ▼ 5

- External web service**
 MFAA - EzioService
 ▼ Service method http://namespace.vub.sk/MFAA/LD/Ezi...
- Web request service**
 ESB - IHS gateway
 ▼ Service method /esblegacy/sca/gateway has failure rate...
- Web request service**
 ESB - LegacyGatewayWeb
 ▲ All dynamic requests have increased failure rates
 ▼ Service method /esblegacy/sca/gateway has failure rate...
 ▼ All dynamic requests have increased failure rates
- Web service**
 ESB - PartyAuthentication
 ▼ Service method generateChallenge has failure rate incre...
- Web service**
 ESB - SegmentDatamart
 ▲ Service ESB - SegmentDatamart has failure rate increase





Problem evolution



2022-08-15 15:35 - 15:40 48 ongoing e components Trend $\Delta 11$

- ▶ Service method /esb/sca/gatewaySe
- ▶ Service method /esblegacy/sca/gate
- ▶ Service method /esblegacy/sca/gate
- ▲ Service method /esb/bpmfacade/gw
- ▲ Service method /esb/sca/gatewaySe
- ▲ All dynamic requests have increased

Web request service
 ESB - LegacyGatewayWeb
 ▶ Service method /esblegacy/sca/gate
 ▶ All dynamic requests slow

Web request service
 FacesScreens (/screens)
 ▶ Service method /screens/crm/naviga

Web request service
 ihvubek/mb old

Problémy

„ Quis custodiet ipsos custodes?
Kto bude strážiť strážcov?“

— Decimus Junius Juvenalis

➤ AIX Memory leak

→ Systemový agent AIX – 100MB/mesiac

➤ JAVA memory leak

→ Špecifická vlastnosť aplikácie (Java runtime recompile scripts)

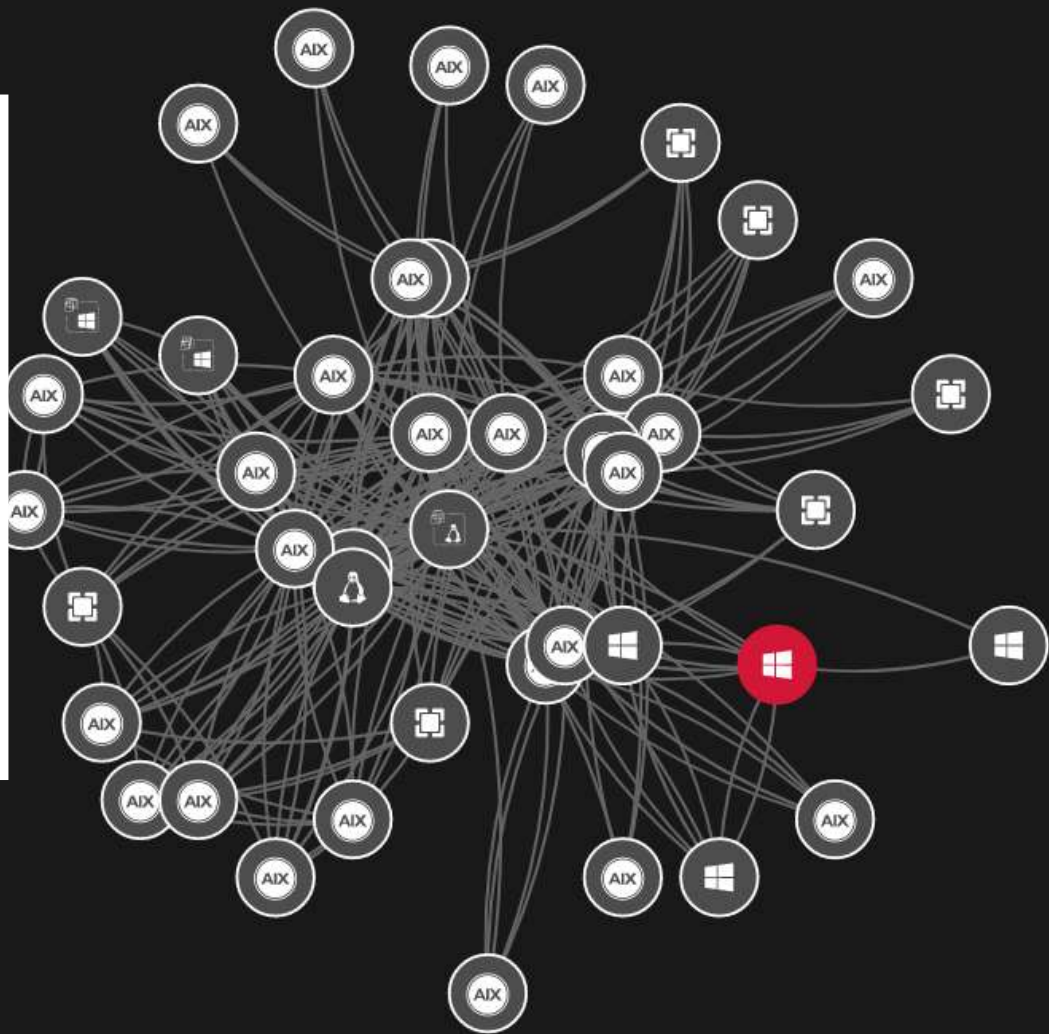
→ IBM? Dynatrace? Knižnica?

→ 2GB/deň

→ Non-heap memory

Produkcja

46 serverov
788 processov
20 aplikácií
2000 služieb
378 externých



Ako fungujeme

*„Problém je len príležitosť v pracovnom oblečení.
— Henry John Kaiser*

- ⇒ **80% fixne pridelené kritické systémy**
- ⇒ **20% plávajúce licencie**
 - Novo nasadené systémy
 - Problémové systémy
- ⇒ **Pozeráme na prsty externistom**
- ⇒ **Kontinuálny upgrade dynatrace**

Monitoring

***„~~Marketing~~ nie je jednorázová aktivita, ale proces.
Má začiatok, stred, ale nikdy koniec, preto je to proces.
Môžete ho zlepšovať, zdokonaľovať, meniť, alebo zastaviť.
Ale nikdy s ním úplne neskončíte.“***

- Jay Conrad Levinson

Ďakujem