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# Telecom Italia – Soluzione Netcool per la gestione clienti Top

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ICT Project Manager

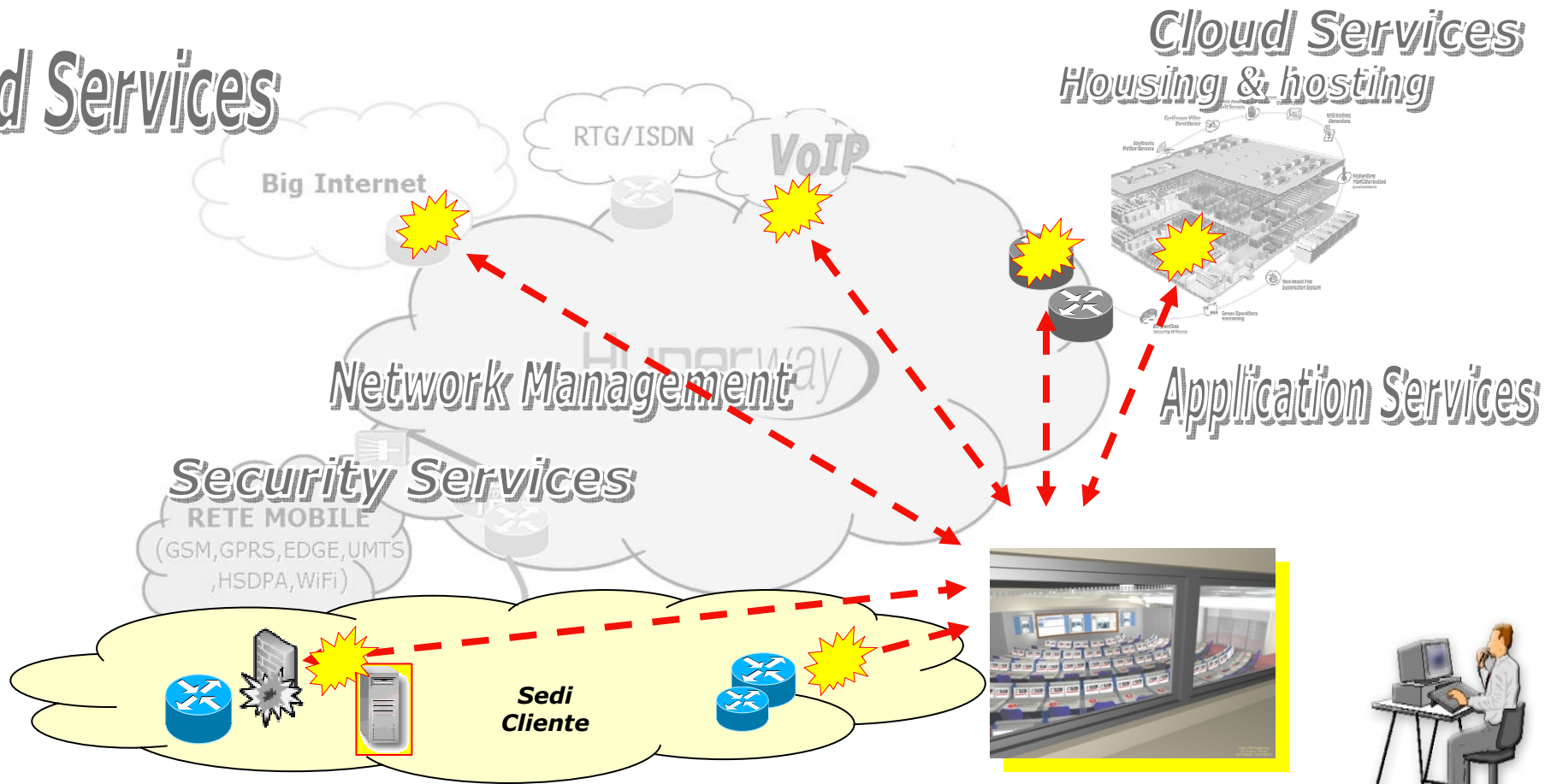


Top clients & Public Sector  
Service Management – ICT Service Engineering

20 novembre 2012

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# Managed Services



## Clienti Top

2.000 clienti con servizi di manutenzione proattiva

160.000 apparati in monitoraggio proattivo

Oltre 400 diverse tipologie di apparati



## Customer Operations



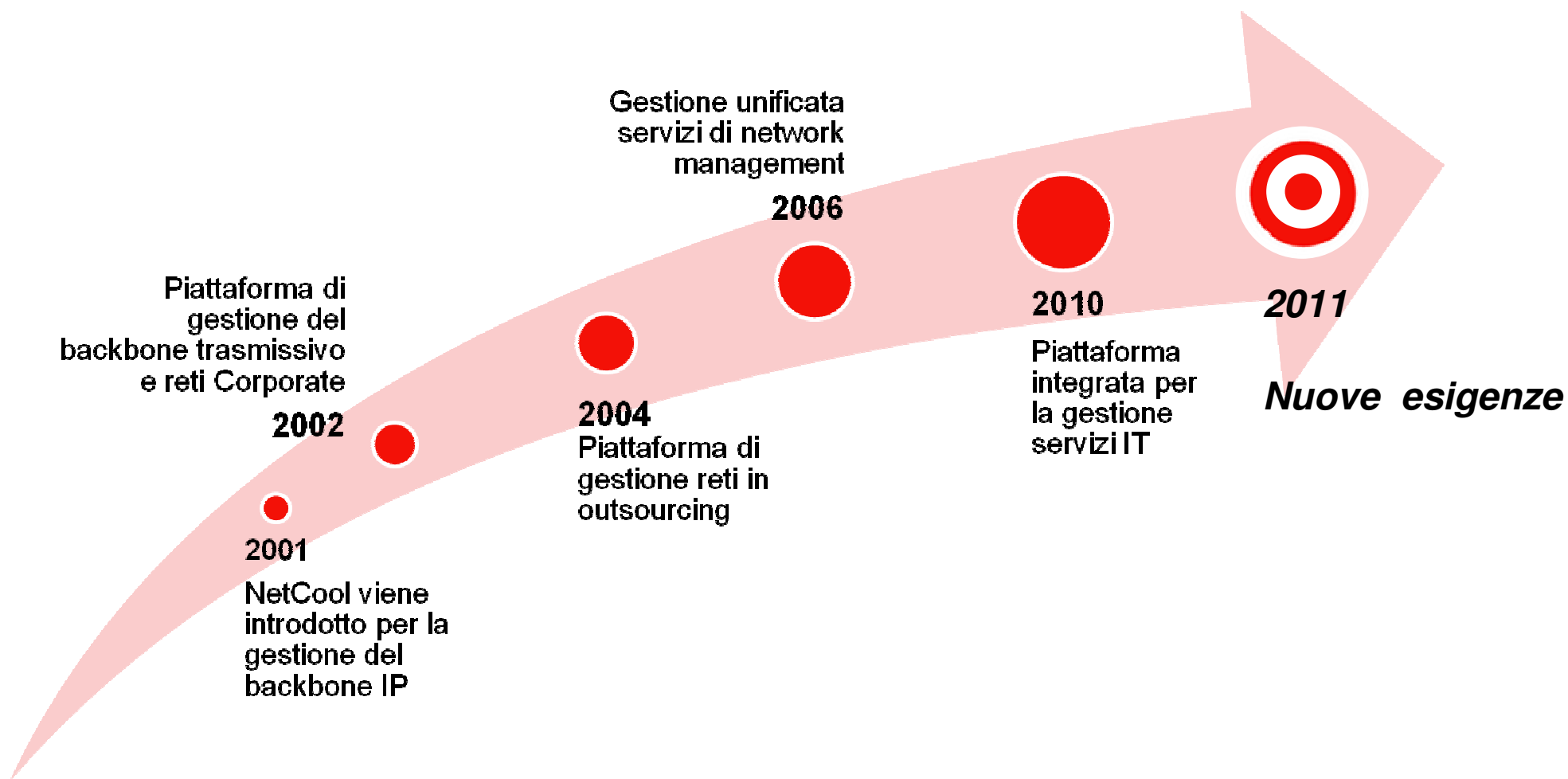
Circa 2000 addetti totali

800 addetti al caring

8 punti di caring

Struttura H24 7/7

## Netcool in TI



## Esigenze 2011-2015

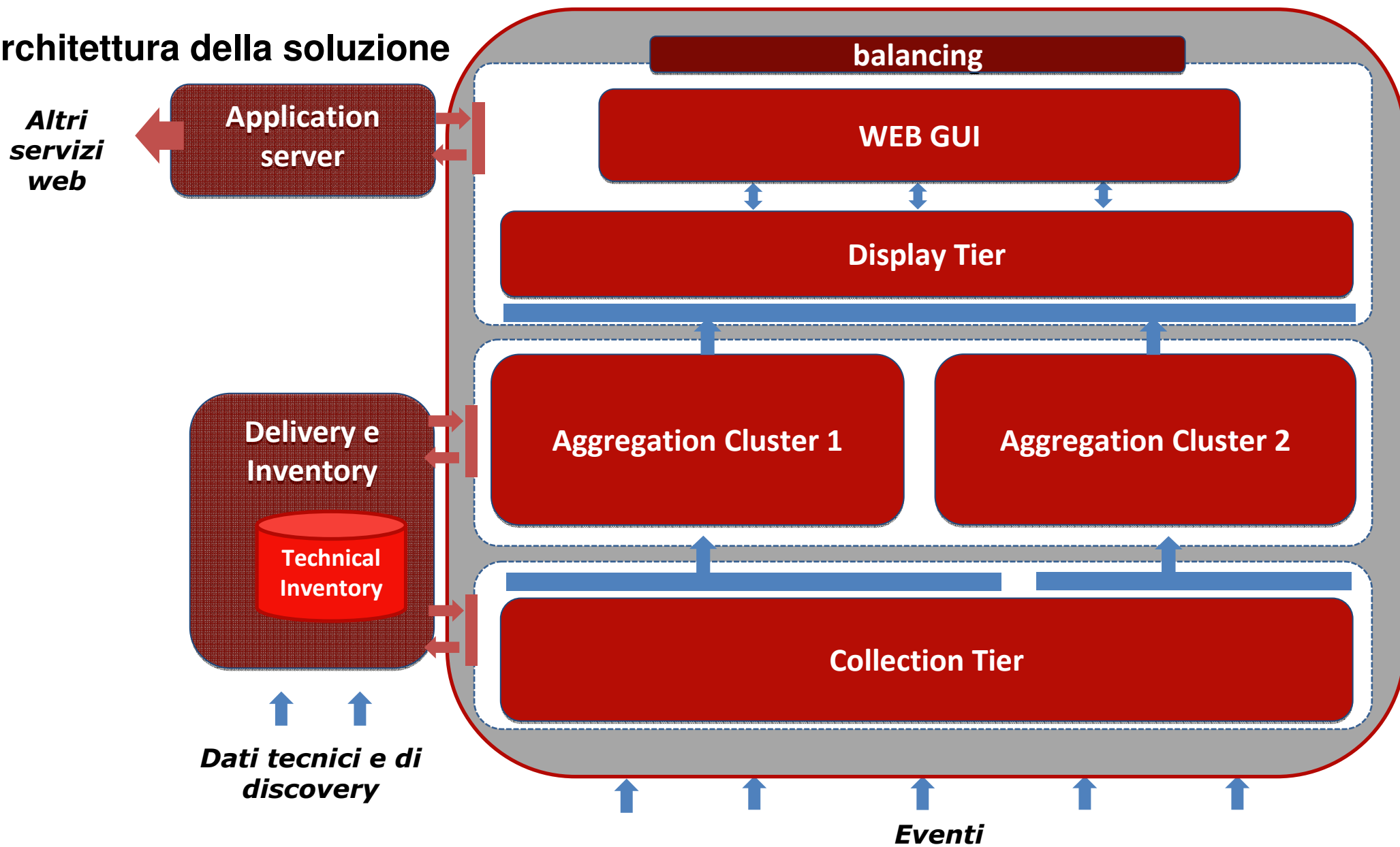
### *Esigenze strategiche*

- ▶ **Gestire volumi crescenti**, per supportare la convergenza delle strutture di caring
- ▶ **Implementare trattamenti differenziati** per classi di clientela e servizi
- ▶ **Favorire l'integrazione tra piattaforme** e strumenti diversi
- ▶ Migrare verso una **infrastruttura virtualizzata** e **abbassare costi** e complessità gestionali

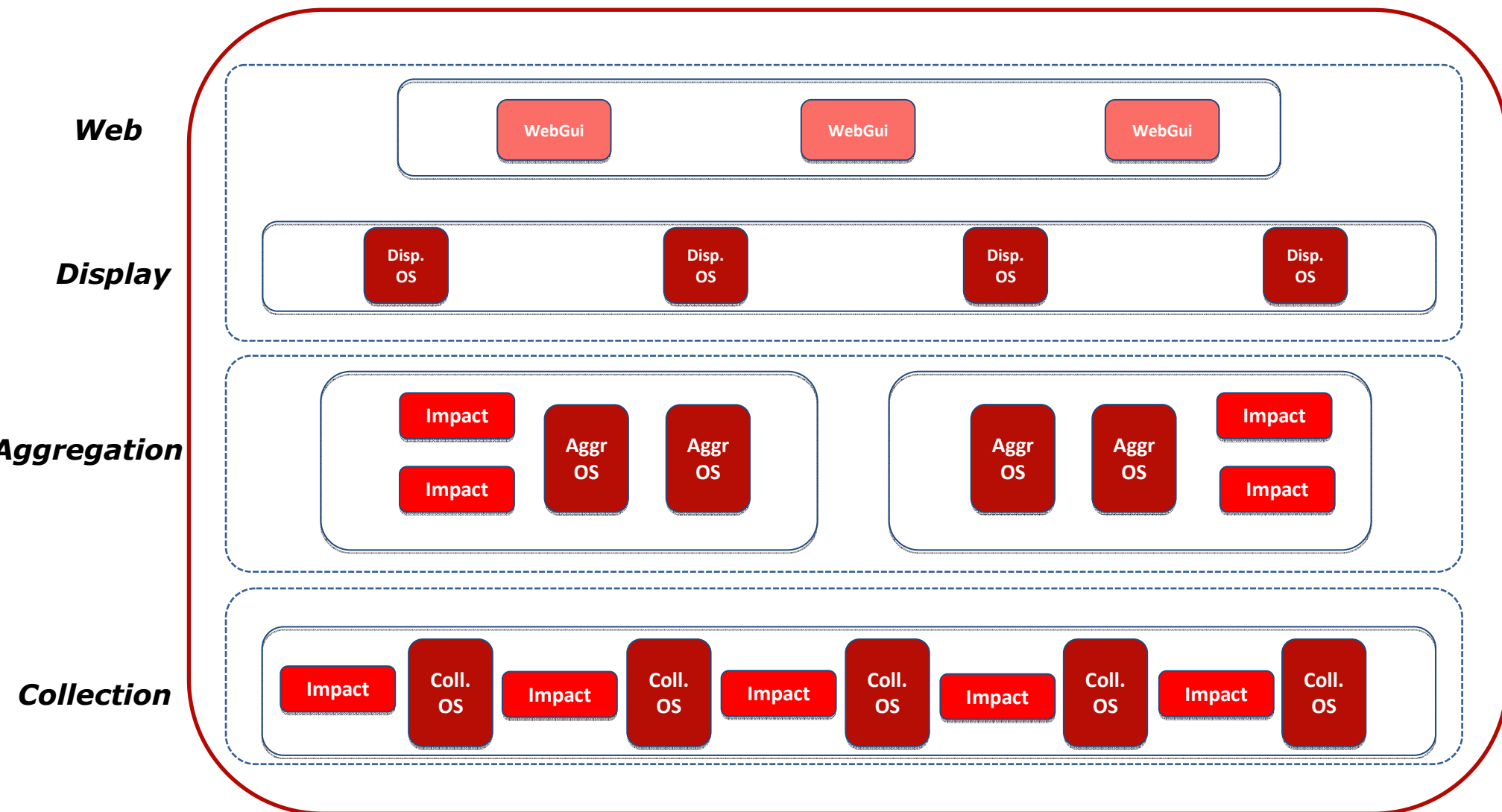
### *Caratteristiche attese*

- ▶ Possibilità di implementare una architettura large scale
- ▶ Flessibilità
- ▶ Interfaccia completamente web based
- ▶ Pieno supporto architetture virtualizzate, strumenti di monitoring

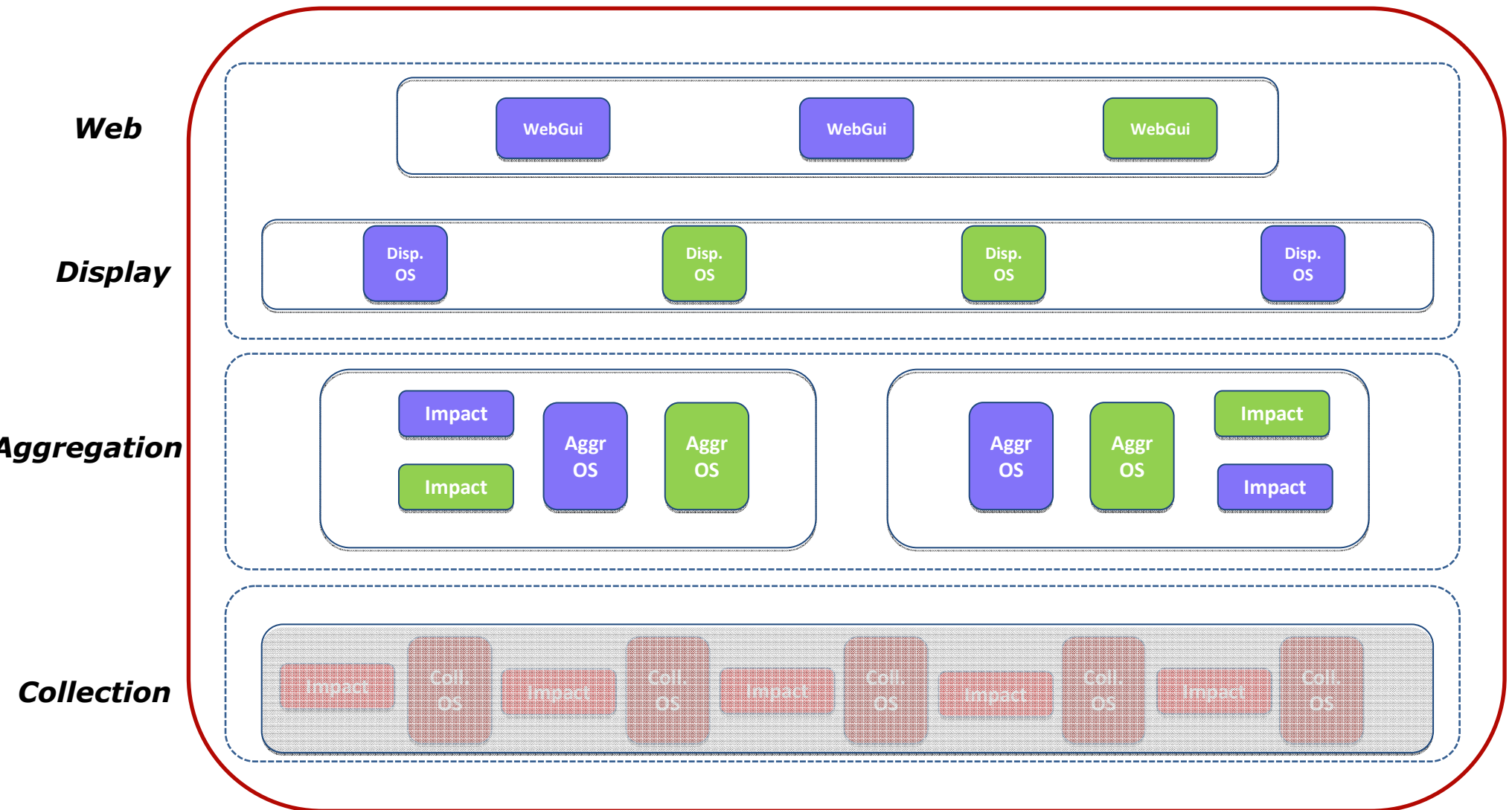
## Architettura della soluzione



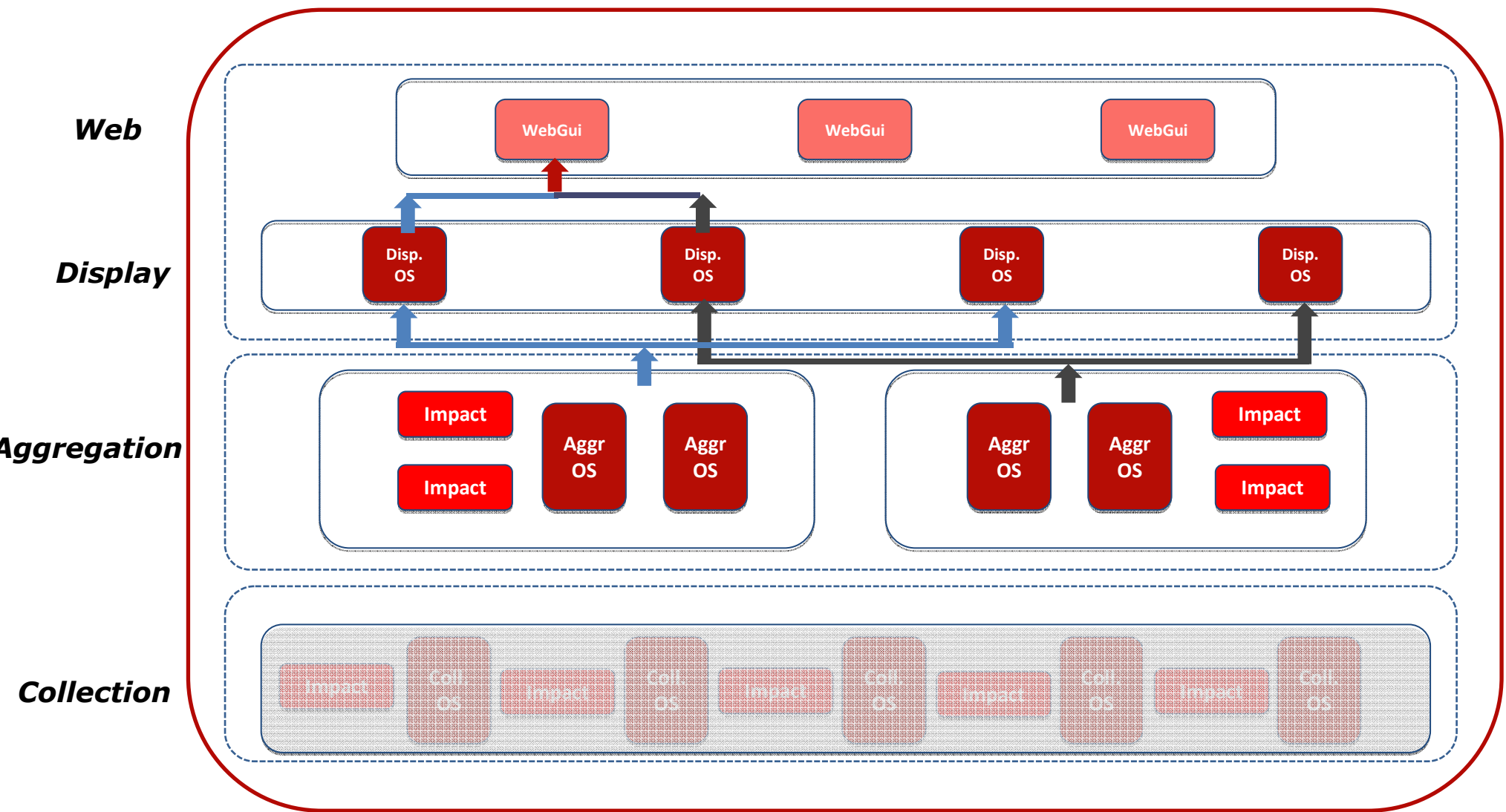
# Mappa componenti



# Architettura fault tolerant

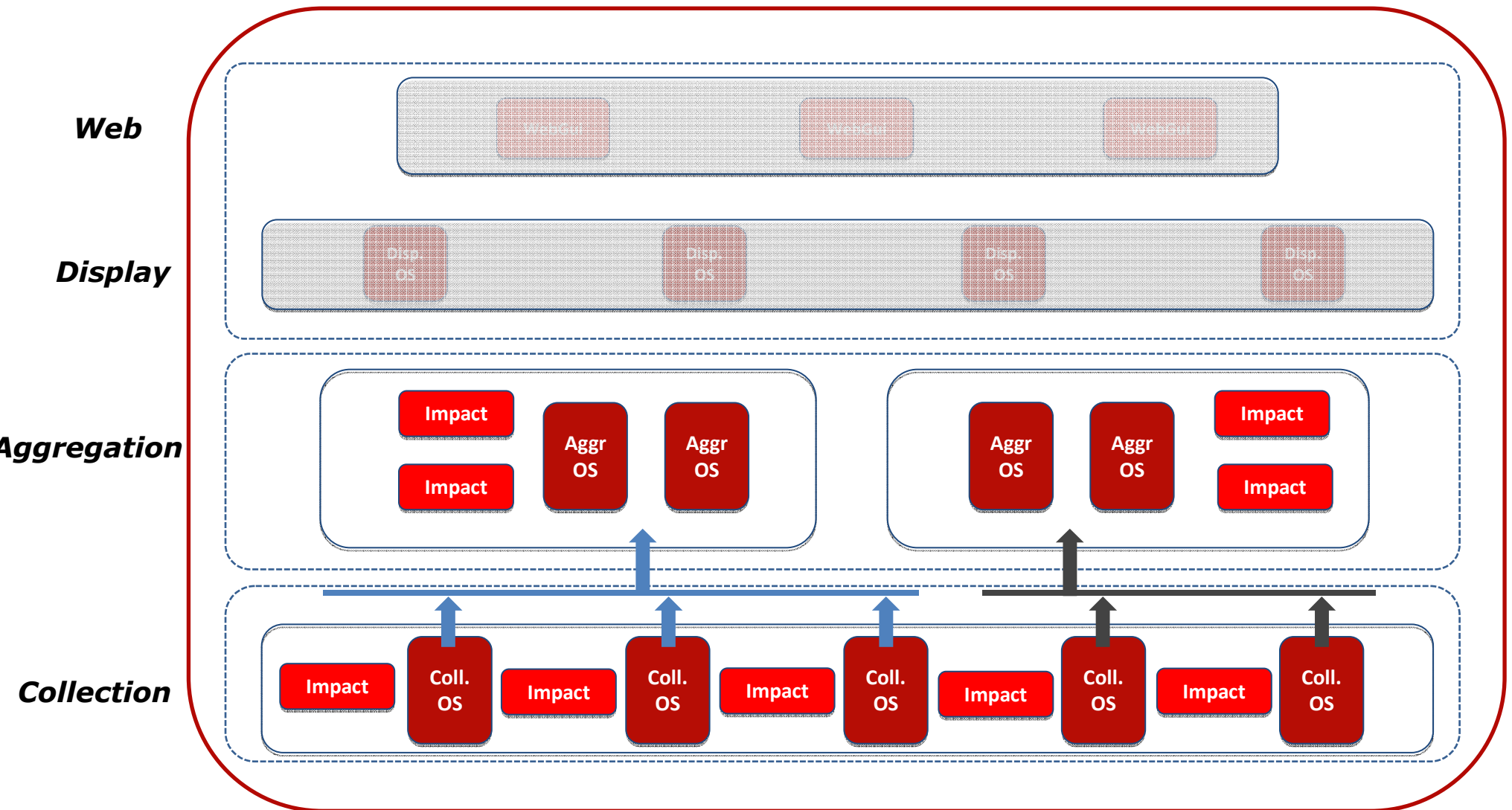


# Gestire volumi crescenti

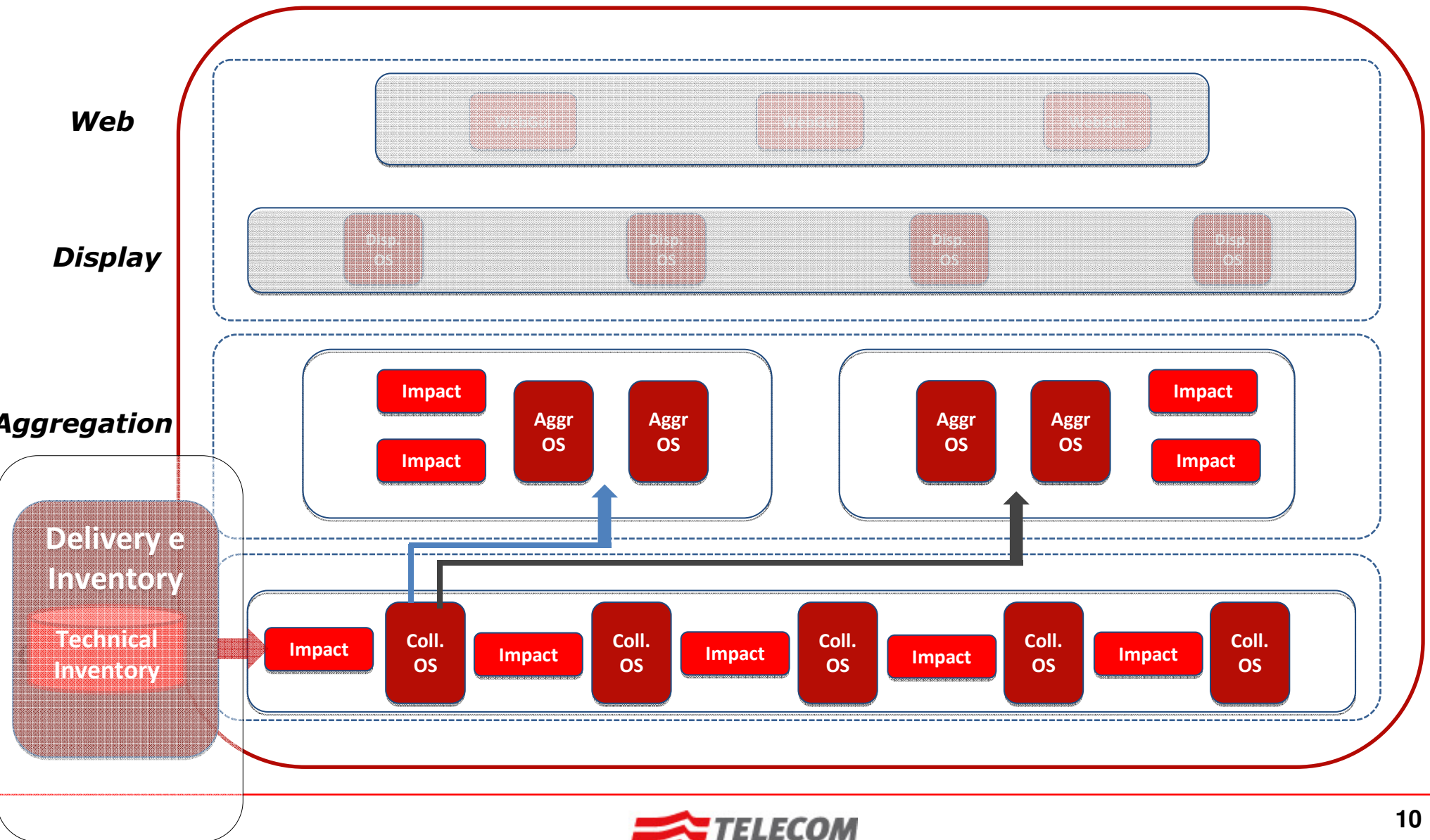




## Trattamenti differenziati



# Trattamenti differenziati



# WebGui - 1

The screenshot displays the Tivoli NetCool WebGUI interface. On the left, a sidebar menu lists various system maps, with 'global' highlighted and circled. The main dashboard, titled 'Dashboard eventi', shows a grid of event cards for different systems. Each card displays the total number of events, the highest severity level (e.g., Critical, Major), and the lowest severity level (e.g., Clear). A bar chart below each card shows the distribution of event severities. The 'Tsf' card is circled in the main dashboard area.

System	Total	Highest Severity	Lowest Severity	Metrica
ComunediraRoma	62	Critical	Clear	2
Enav	1	Critical	Clear	2
ENAV_TX	200	Critical	Clear	1
Enavmulticast	4	Major	Clear	2
Poligrafici_Edit.	8	Major	Clear	2
PolimeriEuropaDati	0	-	-	-
TOTALI	1105	Critical	Clear	105
Tsf	12	Critical	Clear	2
Prysmian	9	Critical	Clear	2
TodS	1	Major	Clear	2
TosInvest	0	-	-	-
ENAV-E-NET	114	Critical	Clear	2

# TELECOM ITALIA - Soluzione NetCool per la gestione clienti Top

The screenshot displays the NetCool monitoring interface for Telecom Italia. It features a map of Italy with regional labels (Trentino Alto Adige, Valle d'Aosta, Lombardia, Piemonte, Liguria, Friuli Venezia Giulia, Veneto, Emilia Romagna) and the Telecom Italia logo. A 'Top Clients' dashboard for 'Custom Area Nord' is visible, showing a grid of event metrics for various services. To the right, an 'Alerts' table lists active alerts with their keys, groups, and occurrence times.

### Top Clients Custom Area Nord

#### Dashboard eventi

Alert Key	AlertGroup	First Occurrence	Last
Index2	ISDN-SERVICE-Alarms	14/11/12 15:13:01	14/11/12 15:13:01
SERIAL_2/1	LINK-DOWN-Alarms	14/11/12 15:10:02	14/11/12 15:10:02

Event Category	Total	Highest	Lowest	Metrica
AllarmiCED	2	Major	Major	4
AllarmiMajor	11	Major	Major	11
ASL_Roma_C	0	-	-	-
ASL_Roma_D	0	-	-	-
ASL_Roma_F	0	-	-	-
BACKUP_ATTIVI	0	-	-	-
Banca_Italia_ITZ	0	-	-	-
BGP	8	Critical	Critical	5
GuastiBloccanti	50	Critical	Critical	5
GuastiBloccanti_solo...	43	Critical	Critical	5
GuastiBloccanti_WIDE	7	Critical	Critical	5
POSTE_AS_Alcatel	41	Critical	Warning	41
Poste_Italiane_...	10	Critical	Major	-
Poste_Italiane_CED	2	Major	Major	-
POSTE_Plattaforma	18	Critical	Critical	-
POSTE_VOIP_TOT	59	Critical	Warning	-

189 rows inserted, 199 rows total. Auto refresh in: 12 sec.

# Integrazione con sistema di TM -1

The screenshot displays the NetCool ImpactStatus interface. The main window shows a table of active events with columns for Node, AlertGroup, and Summary. A context menu is open over the table, with the 'Show TT of the Event' option highlighted. A secondary window titled 'IMAGE' is overlaid, containing instructions in Italian to select a device/connection from a list to view TT information. This window includes a list of devices (Apparato1, Apparato2, Apparato3) and their connections, a form for entering TT details (Area, Identificativo TT, Oggetto TT, etc.), and a list of TTs (TT000100 to TT000104). A 'Associa TT' button is present, and a 'Pronto.' status bar is at the bottom.

Node	AlertGroup	Summary
ssc00288	ImpactStatus	Could not connect to the Primary Server for the
ssc00288	ImpactStatus	Failed to execute Query on the Primary Server f
ssc00288	ImpactStatus	Failed to execute Query on the Primary Server f
ssc00288	ImpactStatus	Failed to execute Query on the Primary Server f
ssc00288	ImpactStatus	Failed to execute Query on the Primary Server f
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ssc00288	ImpactStatus	Failed to execute Query on the Primary Server f
ssc00288	ImpactStatus	Failed to execute Query on the Primary Server f

**Seleziona l'apparato /collegamento nella lista seguente per visualizzare le informazioni del TT:**

- Apparato1
- Apparato2
  - Collegamento1
  - Colegamento1
- Apparato3
  - Collegamento1
  - Collegamento2

Area:   
Identificativo TT:   
Oggetto TT:   
Tipo Oggetto:   
Data Segnalazione:   
Gruppo Responsabile:   
Tipo TT:   
Stato:  Associa TT

+ TT000100  
+ TT000101  
+ TT000102  
+ TT000103  
+ TT000104

Pronto.

# Integrazione con sistema di TM -2

The screenshot shows the ETTM Premium web interface. The main area is titled "Dettaglio Rete" and contains various fields for network configuration, such as "Tipo Ticket", "Messa in Servizio", "Impianto", "Entità", "Riposta", "Fonte Dati", "Tecnologia", "Full Services", "Codice Utilizza", "Emersione Servizio", "Livello Di Warning", "Questo Con Riserva/Non Anagrafato", "Data", "Segnalazione", "Id. Entità", "Tipo Intervento", "Appuntamento", "Id. Reclamo Cliente", "Cod. Settore", and "Tipo Riparazione". Below this is the "Dati Anagrafici" section with fields for "Nome Reclamante", "Tel. Reclamante", "Email Reclamante", etc. At the bottom, there is a "Riepilogo Cliente" section with fields for "Cliente Inadempiente", "Tipo", "Codice Fiscale", "Partita IVA", "Ragione Sociale", "Livello Di Warning", "Header", "Nome", "Cognome", "Indirizzo", "Città", "CAP", "Provincia", "Cod. Dir. Regionale", "Segno", and "Settore".

ImpactStatus@DIS\_1 - Elenco eventi attivi (10.51.19.28:16311)

Node	AlertGroup	TTMIdentifier	TTMDateCreation	Summary
ssc00288	ImpactStatus			Failed to execute Query o
ssc00288	ImpactStatus			Failed to execute Query o
ssc00288	ImpactStatus			Failed to execute Query o
ssc00288	ImpactStatus			Failed to execute Query o
ssc00288	ImpactStatus			Failed to execute Query o
ssc00288	ImpactStatus			Failed to execute Query o
ssc00288	ImpactStatus			Failed to execute Query o

# Self monitoring, monitoraggio continuo performances

The screenshot displays the Tivoli NetCool Active Event List (AEL) interface. The main window shows a table of active events with columns for Summary, DatainsertCOS, DatainsertROS, DatainsertPOS, ERI\_Collection, ERO\_Collection, ERI\_Aggregation, and ERO\_Aggregation. The events are color-coded by severity: green for information, yellow for warnings, and red for errors. A summary bar at the bottom indicates 1732 information events, 239 warnings, 597 errors, 3904 critical events, and 6275 severe events. The interface also includes a left-hand navigation tree and a top navigation bar with 'View: All tasks' and 'Welcome tipadmin'.

Summary	DatainsertCOS	DatainsertROS	DatainsertPOS	ERI_Collection	ERO_Collection	ERI_Aggregation	ERO_Aggregation
Sede CRB-SARSINA-SILVANI 11 connessa	13/11/12 14:21:47	13/11/12 14:22:10	13/11/12 14:51:23	13/11/12 14:21:47	13/11/12 14:21:47	13/11/12 13:24:03	13/11/12 13:24:03
Link Down. Interfaccia Vlan1 del nodo crb-dec7-stazione-cc...	13/11/12 14:50:48	13/11/12 14:51:11	13/11/12 14:51:23	13/11/12 14:50:49	13/11/12 14:50:50	01/01/70 01:00:00	01/01/70 01:00:00
Bgp Down Received. Peer state idle on peer interface 172...	13/11/12 14:50:48	13/11/12 14:51:17	19/09/12 10:11:46	13/11/12 14:50:51	13/11/12 14:50:51	01/01/70 01:00:00	01/01/70 01:00:00
Bgp Down Received. Peer state idle on peer interface 172...	13/11/12 14:50:48	13/11/12 14:51:17	19/09/12 10:11:46	13/11/12 14:50:51	13/11/12 14:50:51	01/01/70 01:00:00	01/01/70 01:00:00
Bgp Down Received. Peer state idle on peer interface 10.5...	13/11/12 14:50:47	13/11/12 14:51:17	01/01/70 01:00:00	13/11/12 14:50:48	13/11/12 14:50:48	01/01/70 01:00:00	01/01/70 01:00:00
Link Down. Interfaccia SERIAL_1 del nodo rfe-taranto-r1 rfe...	13/11/12 14:50:47	13/11/12 14:50:55	13/11/12 14:51:23	13/11/12 14:50:50	13/11/12 14:50:50	13/11/12 14:50:47	13/11/12 14:50:47
NODO RAGGIUNGIBILE - Startup card in progress su appa...	13/11/12 14:50:47	13/11/12 14:51:11	13/11/12 14:51:23	13/11/12 14:50:49	13/11/12 14:50:49	13/11/12 14:51:13	13/11/12 14:51:13
Linea di backup ISDN disconnessa. Nodo epi-66042-venez...	13/11/12 14:48:42	13/11/12 14:49:14	13/11/12 14:43:37	13/11/12 14:48:45	13/11/12 14:48:45	13/11/12 14:51:16	13/11/12 14:51:16
Linea di backup ISDN attiva. Nodo epi-39043a02-bologna...	13/11/12 14:50:47	13/11/12 14:51:17	13/11/12 14:50:26	13/11/12 14:50:48	13/11/12 14:50:48	01/01/70 01:00:00	01/01/70 01:00:00
Tentativo di connessione ISDN. Nodo buu-azimut-2821-vg0...	13/11/12 14:50:47	13/11/12 14:51:03	13/11/12 14:51:23	13/11/12 14:50:50	13/11/12 14:50:50	13/11/12 14:51:03	13/11/12 14:51:03
Nodo buu-azimut-2821-vg01 buu.it (interfaccia ifIndex117)1...	13/11/12 14:45:50	13/11/12 14:46:04	13/11/12 14:51:23	13/11/12 14:45:52	13/11/12 14:45:52	13/11/12 14:51:03	13/11/12 14:51:03
Bgp Up Received. Peer state established on peer interface ...	13/11/12 14:50:45	13/11/12 14:50:51	13/11/12 14:51:23	13/11/12 14:50:46	13/11/12 14:50:46	13/11/12 14:50:52	13/11/12 14:50:52
Link Up. Interfaccia ETHERNET_1/1 del nodo bek-sisal-pdv...	13/11/12 12:52:01	13/11/12 12:52:10	13/11/12 14:51:53	13/11/12 12:52:04	13/11/12 12:52:04	13/11/12 14:50:47	13/11/12 14:50:47
Bgp Down Received. Peer state idle on peer interface 192...	13/11/12 14:50:48	13/11/12 14:51:13	28/10/12 15:14:52	13/11/12 14:50:48	13/11/12 14:50:48	01/01/70 01:00:00	01/01/70 01:00:00
Linea di backup ISDN attiva. Nodo sgs-cripl-2617-camporg...	13/11/12 14:50:46	13/11/12 14:51:14	13/11/12 14:51:23	13/11/12 14:50:46	13/11/12 14:50:46	01/01/70 01:00:00	01/01/70 01:00:00
Tentativo di connessione ISDN. Nodo epi-57004-napoli-sal...	13/11/12 14:50:46	13/11/12 14:51:17	13/11/12 14:50:46	13/11/12 14:50:48	13/11/12 14:50:48	13/11/12 14:51:16	13/11/12 14:51:16
Link Up. Interfaccia ETHERNET_1/2 del nodo epi-39043a0...	13/11/12 14:49:48	13/11/12 14:50:13	13/11/12 14:49:48	13/11/12 14:49:48	13/11/12 14:49:48	13/11/12 14:51:16	13/11/12 14:51:17
Linea di backup ISDN attiva. Nodo dny-aslrnc-seugenio-vg...	13/11/12 14:50:46	13/11/12 14:51:14	13/11/12 14:51:23	13/11/12 14:50:46	13/11/12 14:50:46	01/01/70 01:00:00	01/01/70 01:00:00

## Stato del progetto e risultati raggiunti

### Esigenze strategiche

- ▶ Gestire volumi crescenti, per supportare la convergenza delle strutture di caring
- ▶ Implementare trattamenti differenziati per classi di clientela e servizi
- ▶ Favorire l'integrazione tra piattaforme e strumenti diversi
- ▶ Migrare verso una infrastruttura virtualizzata e abbassare costi e complessità gestionali

### Risultati

- ✓ ***Infrastruttura che scala fino a oltre 100.000 allarmi residenti***
- ✓ ***Filiera "allarmi critici" e possibilità di differenziare per singolo contratto/apparato***
- ✓ ***Integrazione Web based***
- ✓ ***Utilizzo esclusivo di VM, ambiente di monitoraggio in tempo reale***