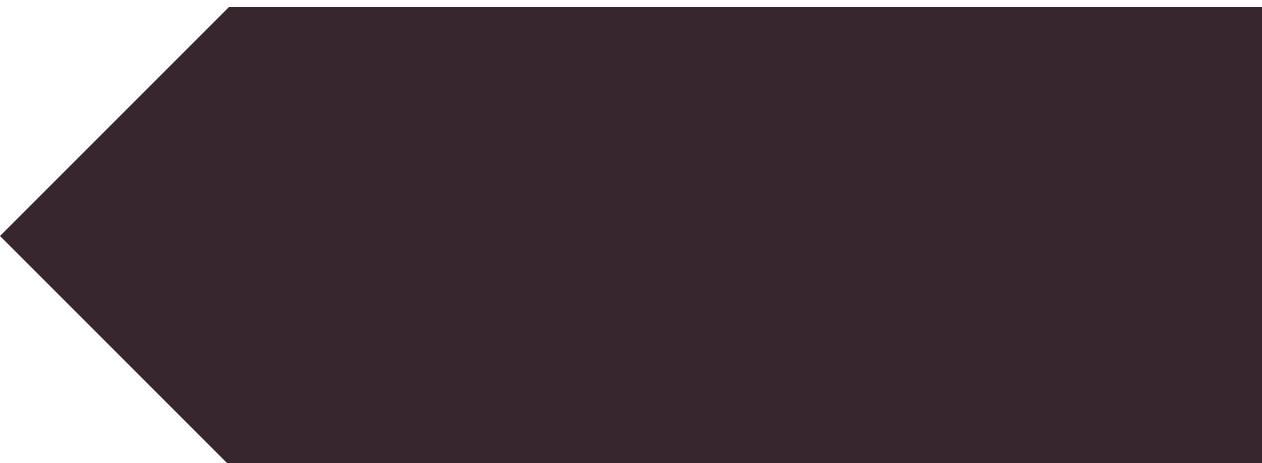




dsfgsdgs

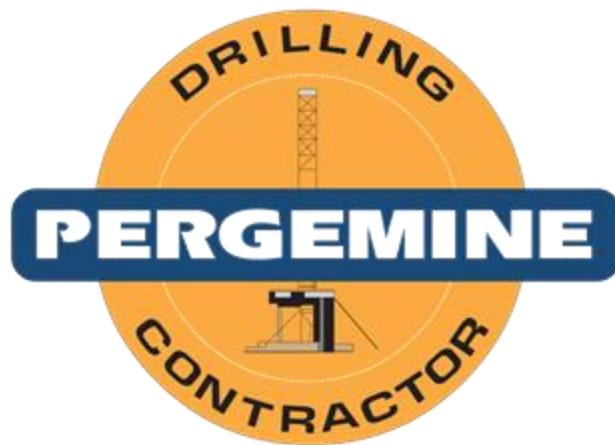


L'orchestrazione al servizio dell'impresa

Alessandro Alpi
Michele Ferracin



Sponsor & Org



2021



NOW
HIRING

open



Dimensioni e distribuzione del problema

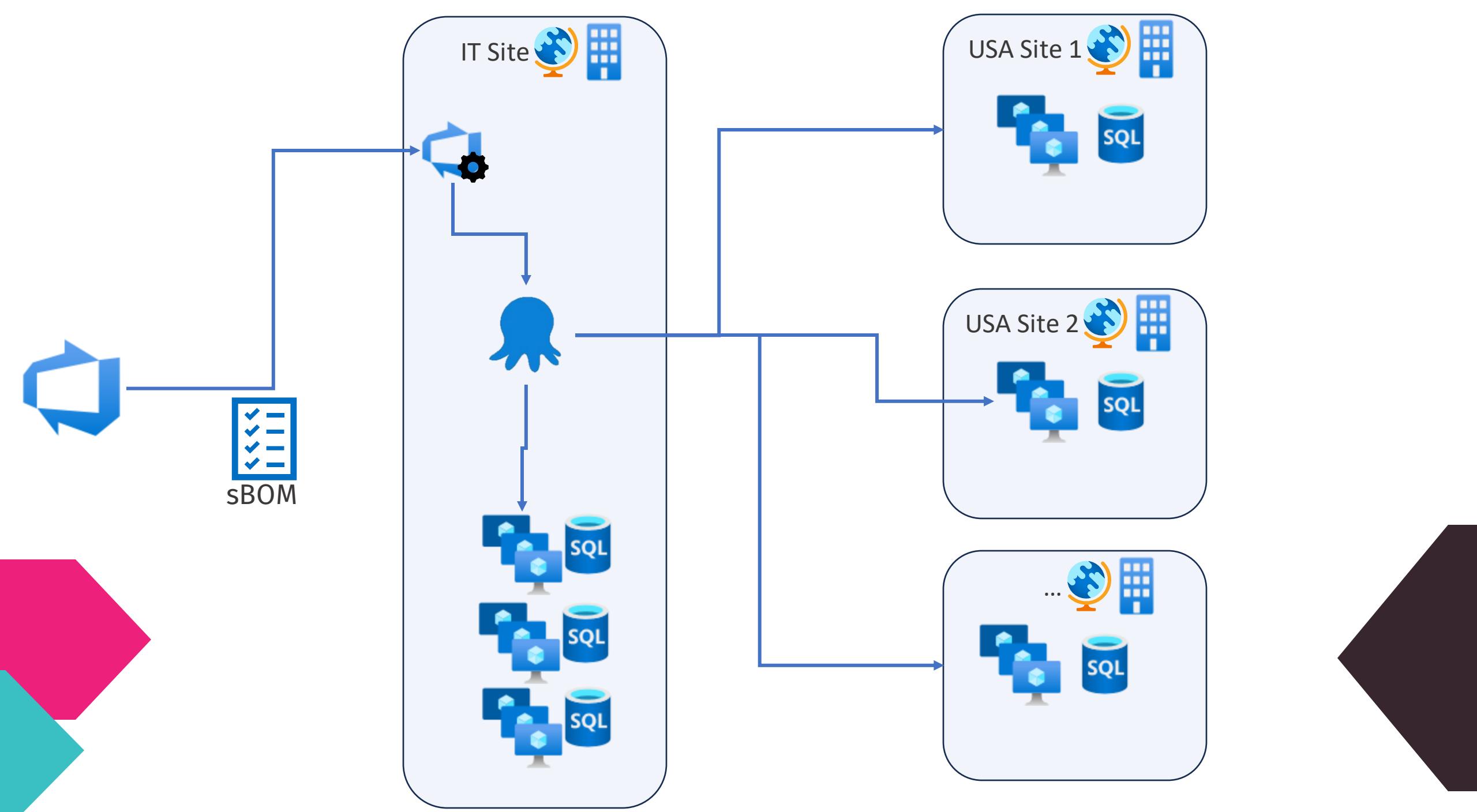
Produzione

2 site USA [1x WDC, 1x NJ] + 1 in arrivo (Ohio)

1 site ITALIA (multi-tenant)

1 site Sud America

+ Staging



A close-up photograph of a man's face and hands. He is wearing a dark suit jacket over a light-colored shirt. His hands are resting on a large stack of papers or files. He is looking directly at the camera with a serious expression. The background is blurred, showing more of the stack of papers.

Compliance USA

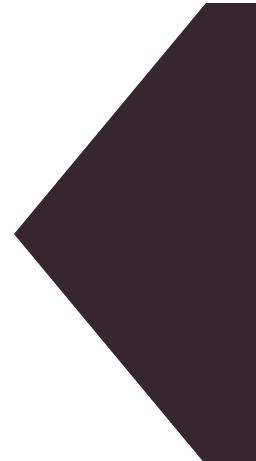


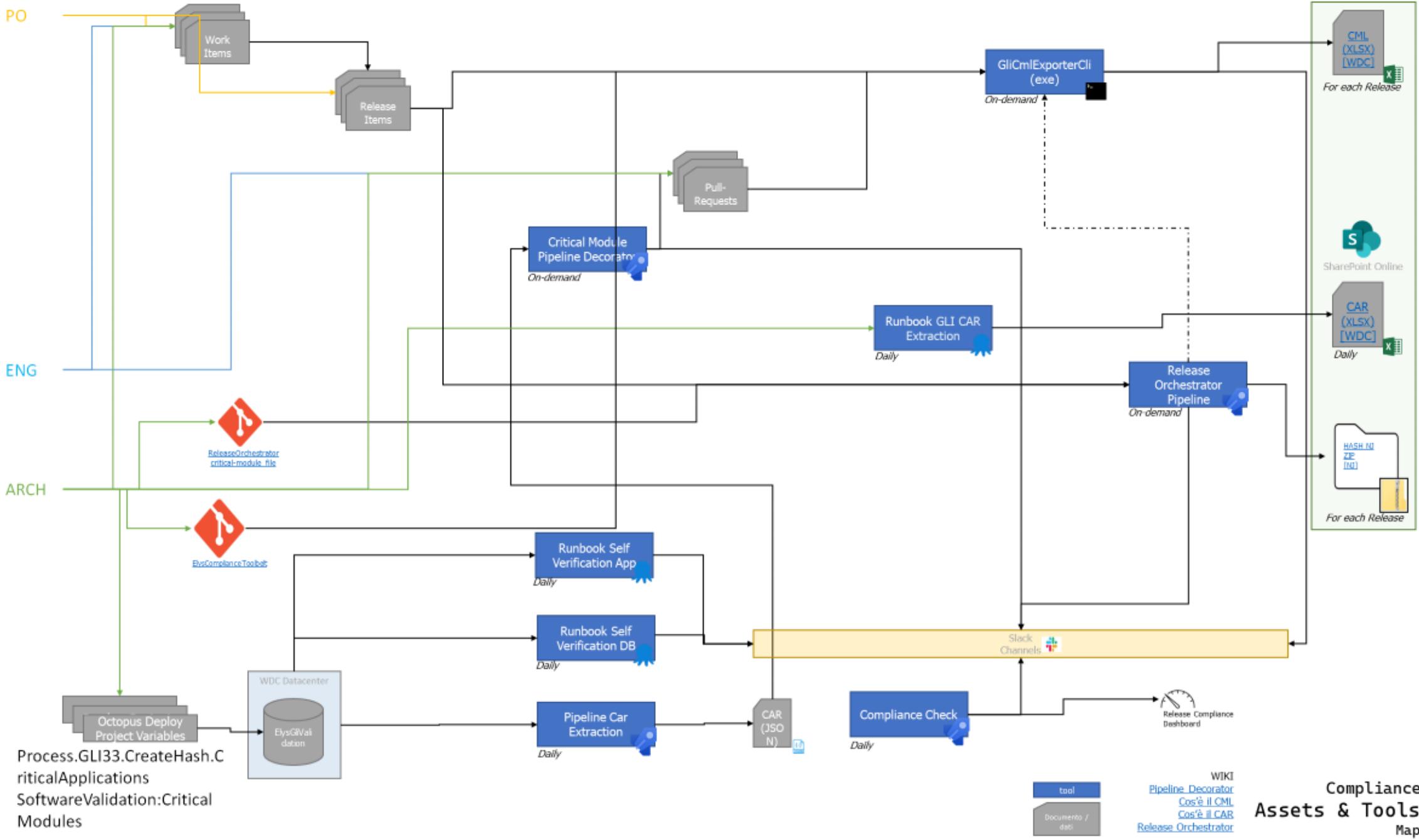
Compliance USA

Artefatti da produrre
(per stato)

Gatekeeper esterni

Separazione.





A photograph of a server room filled with tall server racks. The racks are dark with small blue lights indicating activity. The ceiling is dark with long, glowing blue and white rectangular light fixtures. In the bottom left corner, there are three overlapping diagonal arrows pointing from bottom-left to top-right: a large pink arrow, a smaller teal arrow above it, and a dark brown arrow below it.

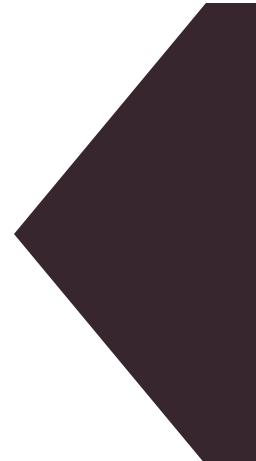
Database

Database

Dati statici

Ottimizzazioni

Configurazioni.





Il processo di deployment



Accelerate
Nicole Forsgen,
Jez Humble, Gene
Kim

*Dove ci sono i rilasci più dolorosi
è dove si troveranno le più
scadenti prestazioni
organizzative, culturali e di
gestione del software in
generale.*

IF IT HURTS, DO IT MORE OFTEN

FIND WHAT HURTS AND KEEP DOING IT A BIT BETTER

“

Find the part of your process in **getting value to customers** that slows you down or hurts the most. Make it **incrementally better** each sprint. Re-evaluate and improve the next most painful.

”



@abelsquidhead

Il processo di release - Prima

Incertezza su componenti esatti rilasciati.

Meeting per tutta la burocrazia USA e compilare gli artefatti per la compliance per ogni stato [Moduli critici, CAR]

Meeting go-no-go con gli stakeholder + QA con check list Excel.

Release «semi-automatiche» eseguite da senior

DBA con frequenti script eseguiti a mano in RDP.

Ambienti di staging «gestiti» su Slack.

Il processo di release - Dopo

Anteprima della sBOM con controllo dei PO + Dev (🔔 Slack)

Dashboard di controllo con semafori di ambiente

Meeting on-demand per i casi dubbi di compliance

Meeting go-no-go con gli stakeholder + rappresentante QA strutturato
Azure DevOps Test Plan.

Release seguite a rotazione.

Operazioni a database completamente automatizzate DBA solo di supervisione (script già revisionati in PR).



Come ci siamo riusciti?



A group of people are gathered around a wooden conference table, engaged in a collaborative discussion. The table is cluttered with various items: several laptops, a smartphone, a tablet displaying a dashboard with multiple graphs and charts, several cups of coffee, and numerous papers and notebooks. One person in the foreground is holding up a document with a chart showing a significant increase in sales. The scene is lit from above, creating a warm, focused atmosphere.

Tecniche di deployment

I rilasci manuali



I rilasci manuali

Alto rischio.

Processo lungo.

Fuori orario lavorativo.

I rilasci automatizzati



I rilasci automatizzati

Non risolvono i problemi di qualità.

Risolve il problema degli errori umani e della
«velocità».

I rilasci automatizzati con architetture a servizi distribuiti



I rilasci automatizzati con architetture a servizi distribuiti



I rilasci automatizzati con architetture a microservizi

Introducono di nuovo l'errore umano (di tipo diverso).

Difficile tenere traccia di cosa è stato rilasciato e dove.

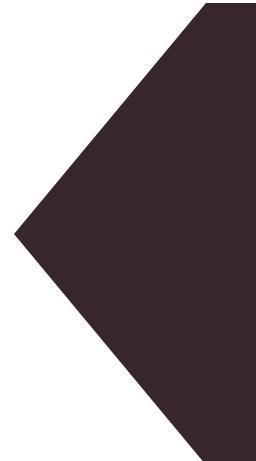
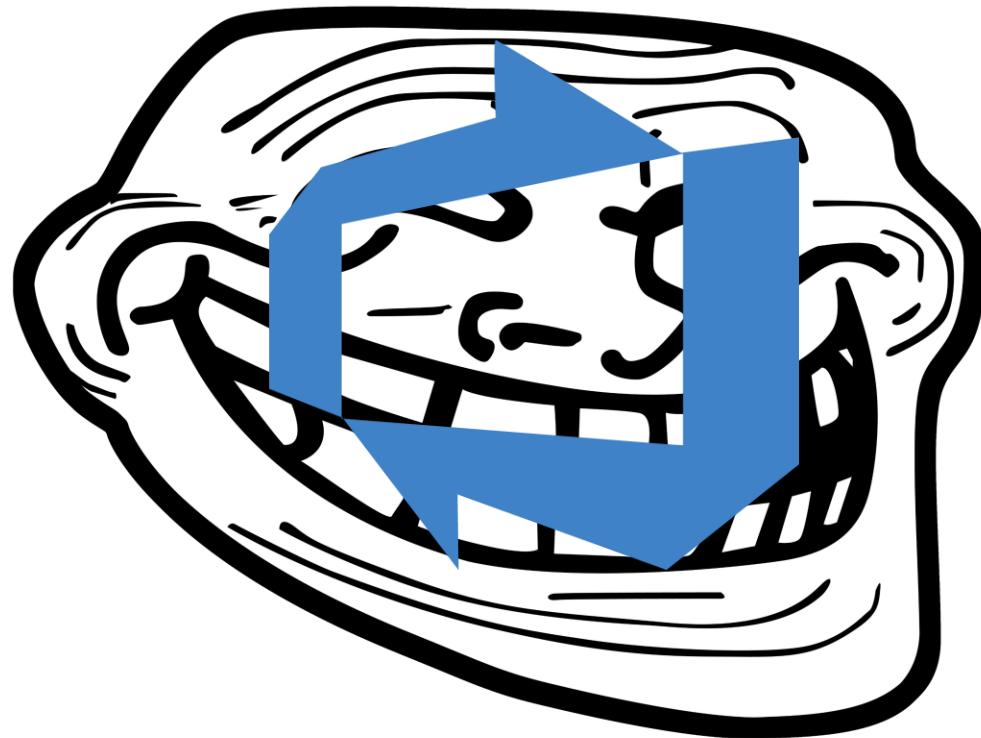


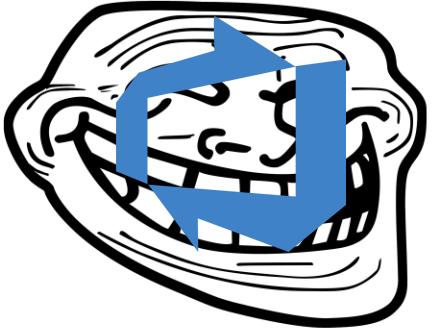
Release
Orchestrator



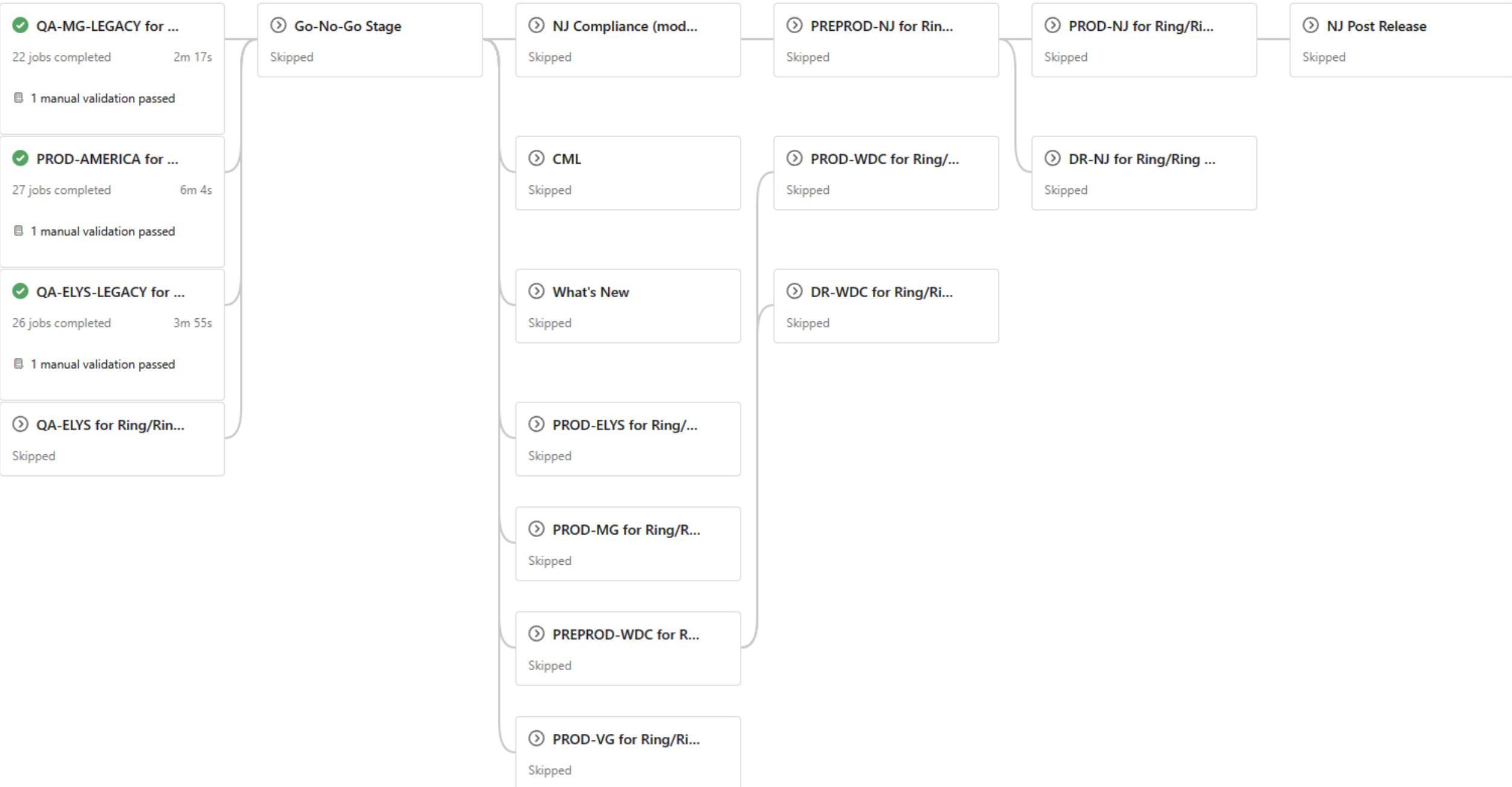
Octopus Deploy è API-first

Sostituiamo l'umano che clicca con qualcos'altro...





Services	Staging	Staging	Production	Production	Production	Production V	Production	Production
	2.4.0 Apr 29, 2022 12:49 PM	2.4.0 Apr 29, 2022 12:49 PM	2.4.0 Apr 29, 2022 12:49 PM	2.4.0 Apr 29, 2022 7:48 AM	2.4.0 May 2, 2022 7:35 AM	1.0.22095.1 Apr 26, 2022 7:28 AM	2.4.0 May 2, 2022 8:04 AM	2.4.0 May 2, 2022 8:04 AM
	This task completed without any problems. Duration: 21 seconds							
	2.1.0 Apr 16, 2022 2:37 PM	2.1.0 Apr 16, 2022 2:37 PM	2.1.0 Apr 20, 2022 10:56 AM	2.1.0 May 2, 2022 7:36 AM	2.1.0 May 2, 2022 7:36 AM	2.1.0 May 2, 2022 7:36 AM	2.1.0 May 2, 2022 7:36 AM	2.1.0 May 2, 2022 7:36 AM
	2.4.0 Apr 29, 2022 1:52 PM	2.4.0 Apr 29, 2022 1:52 PM	2.4.0 Apr 29, 2022 1:52 PM	2.4.0 May 2, 2022 7:48 AM	2.4.0 May 2, 2022 7:36 AM	1.0.22088.1 Apr 26, 2022 7:22 AM	2.4.0 May 2, 2022 8:04 AM	2.4.0 May 2, 2022 8:04 AM
	2.1.1 Apr 22, 2022 6:58 PM	2.1.1 Apr 22, 2022 6:58 PM	2.1.1 Apr 22, 2022 6:58 PM	2.1.1 May 2, 2022 7:37 AM	2.1.1 May 2, 2022 7:37 AM	2.1.0 Apr 26, 2022 7:31 AM	2.1.1 Apr 26, 2022 12:22 PM	2.1.1 Apr 26, 2022 12:22 PM
	2.1.0 Apr 16, 2022 2:38 PM	2.1.0 Apr 16, 2022 2:38 PM	2.1.0 Apr 20, 2022 10:56 AM	2.1.0 May 2, 2022 7:36 AM	2.1.0 May 2, 2022 7:36 AM		2.1.0 May 2, 2022 7:36 AM	2.1.0 May 2, 2022 7:36 AM
	2.3.0 Apr 16, 2022 2:51 PM	2.3.0 Apr 16, 2022 2:51 PM	2.3.0 Apr 20, 2022 10:56 AM	2.3.0 Apr 26, 2022 7:32 AM	2.3.0 May 2, 2022 7:37 AM	2.3.0 May 2, 2022 7:37 AM	2.3.0 May 2, 2022 7:37 AM	2.3.0 May 2, 2022 7:37 AM
	2.3.0 Apr 29, 2022 11:38 AM	2.3.0 Apr 29, 2022 11:38 AM	2.3.0 Apr 29, 2022 11:38 AM	2.3.0 May 2, 2022 7:38 AM	2.3.0 May 2, 2022 7:38 AM	2.1.0 Apr 26, 2022 7:28 AM	2.3.0 May 2, 2022 7:38 AM	2.3.0 May 2, 2022 7:38 AM
	2.2.0 Apr 16, 2022 2:57 PM	2.2.0 Apr 16, 2022 2:57 PM	2.2.0 Apr 19, 2022 6:58 PM	2.2.0 Apr 26, 2022 6:55 AM	2.2.0 Apr 26, 2022 6:55 AM			
	2.3.0 Apr 29, 2022 10:53 AM	2.3.0 Apr 29, 2022 10:53 AM	2.3.0 Apr 29, 2022 10:53 AM	2.3.0 May 2, 2022 7:48 AM	2.3.0 May 2, 2022 7:48 AM	1.0.22089.1 Apr 26, 2022 7:32 AM	2.3.0 May 2, 2022 8:04 AM	2.3.0 May 2, 2022 8:04 AM
	1.17.0 May 9, 2022 12:18 PM	1.17.0 May 9, 2022 12:18 PM	1.17.0 May 9, 2022 12:18 PM	1.16.0 May 2, 2022 7:43 AM	1.16.0 May 2, 2022 7:40 AM		1.16.0 May 2, 2022 7:46 AM	1.16.0 May 2, 2022 7:46 AM
	2.4.1 May 4, 2022 2:41 PM	2.4.0 May 4, 2022 6:08 PM	2.4.0 May 4, 2022 10:43 AM	2.4.0 May 2, 2022 6:24 PM	2.4.4 May 9, 2022 10:29 PM	2.4.0 May 2, 2022 6:33 PM	2.3.0 May 2, 2022 8:58 AM	2.3.0 May 2, 2022 8:58 AM
	2.4.0 Apr 29, 2022 11:38 AM	2.4.0 Apr 29, 2022 11:38 AM	2.4.0 Apr 29, 2022 11:38 AM	2.4.0 May 2, 2022 7:43 AM	2.4.0 May 2, 2022 7:43 AM	1.0.22095.1 Apr 26, 2022 7:19 AM	2.4.0 May 2, 2022 7:43 AM	2.4.0 May 2, 2022 7:43 AM
	2.1.0 Apr 16, 2022 2:58 PM	2.1.0 Apr 16, 2022 2:58 PM	2.1.0 Apr 16, 2022 10:57 AM	2.1.0 May 2, 2022 7:34 AM	2.1.0 May 2, 2022 7:34 AM	2.1.0 May 2, 2022 7:34 AM	2.1.0 May 2, 2022 7:34 AM	2.1.0 May 2, 2022 7:34 AM

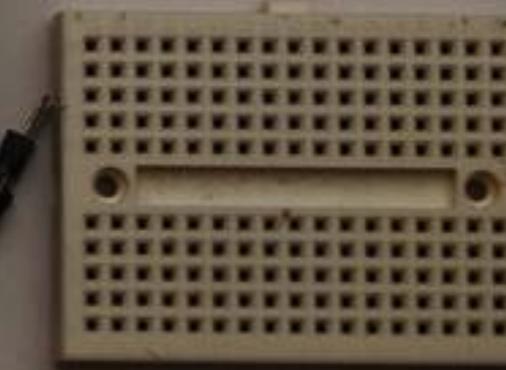
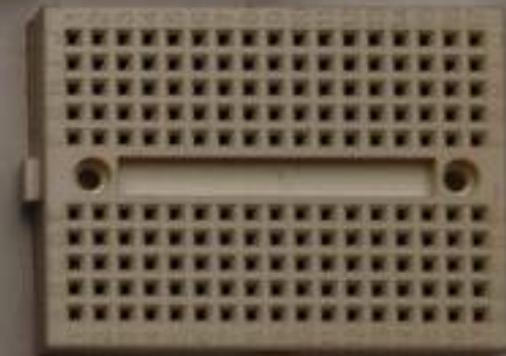


Questo sfondo è stato gentilmente suggerito da una IA

Principi



Distinta base / Software Bill of Material (sBoM)



Un documento che specifica quali componenti e quale versione ci interessano.

Snapshot

Poter generare/fotografare una versione al bisogno con un solo tasto.



Altri requisiti

Storia delle release

Idempotente

Stato di avanzamento

Controlli di avanzamento

Scelta ambienti

Ricerca

Progressive exposure

Processi «di contorno»



Supporto al processo aziendale

La pipeline «di release» agisce come:

Automazione
Octopus

Guida al
processo
aziendale

Controlli su work-item di blocco ambiente.

Stages Jobs

Check-list e controlli i...
1 job completed 28s
1 manual validation passed

Staging (IT) for Ring/...
4 jobs completed 46s
1 manual validation passed

Production Skipped

Production Skipped

Production Skipped

Post Release Skipped

What's New Skipped

Situazione ambienti

Ogni quadrato rappresenta un environment.

Se rosso, **controllare** gli item all'interno dell'ambiente per blocchi o restrizioni.

Staging IT

0

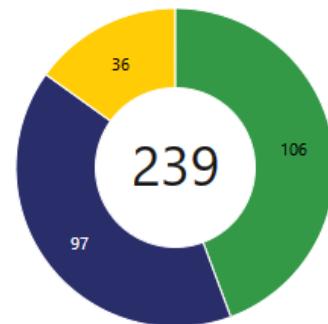
Work items

Prod. IT

0

Work items

Smoke Outcome



Staging AMERIC...

0

Work items

Preprod WDC

0

Work items

Prod. WDC

0

Work items

Come fare per bloccare un ambiente

Per segnalare un blocco su un ambiente creare un work-item di impedimento dall'apposito template disponibile qui sotto. Scegliere il template per il proprio ambiente. Quando si vuole liberare l'ambiente, mettere l'impedimento a Done.

- Staging IT
- Staging COM
- Staging AMERICA aka ODAME
- QA ELYS

-
- Preprod WDC
 - Preprod NJ

-
- Prod IT
 - Prod COM
 - Prod WDC
 - Prod NJ
 - Prod VGEN

Staging COM

0

Work items

Prod. COM

0

Work items

QA Elys

0

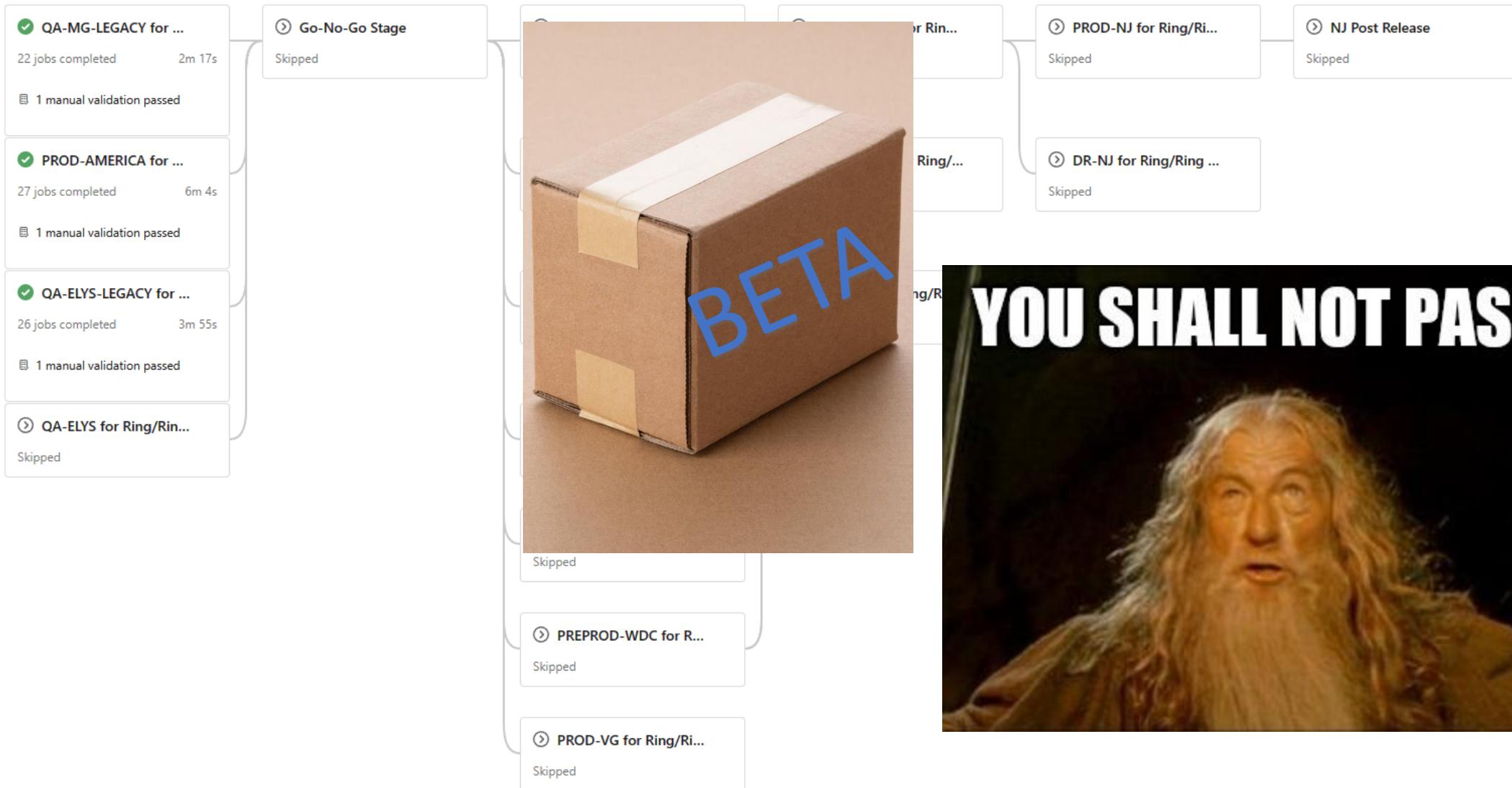
Work items

Prod. VGEN

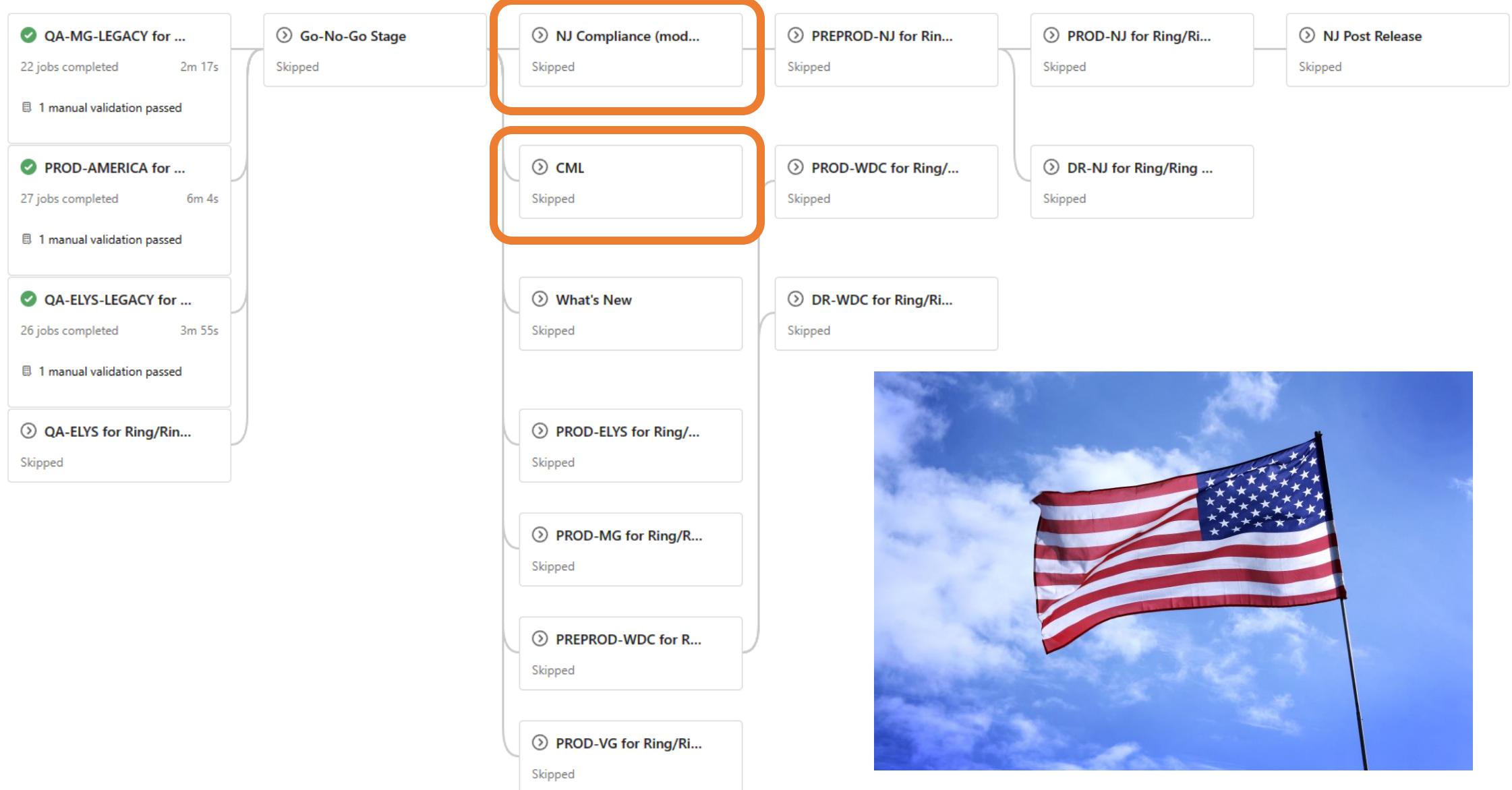
0

Work items

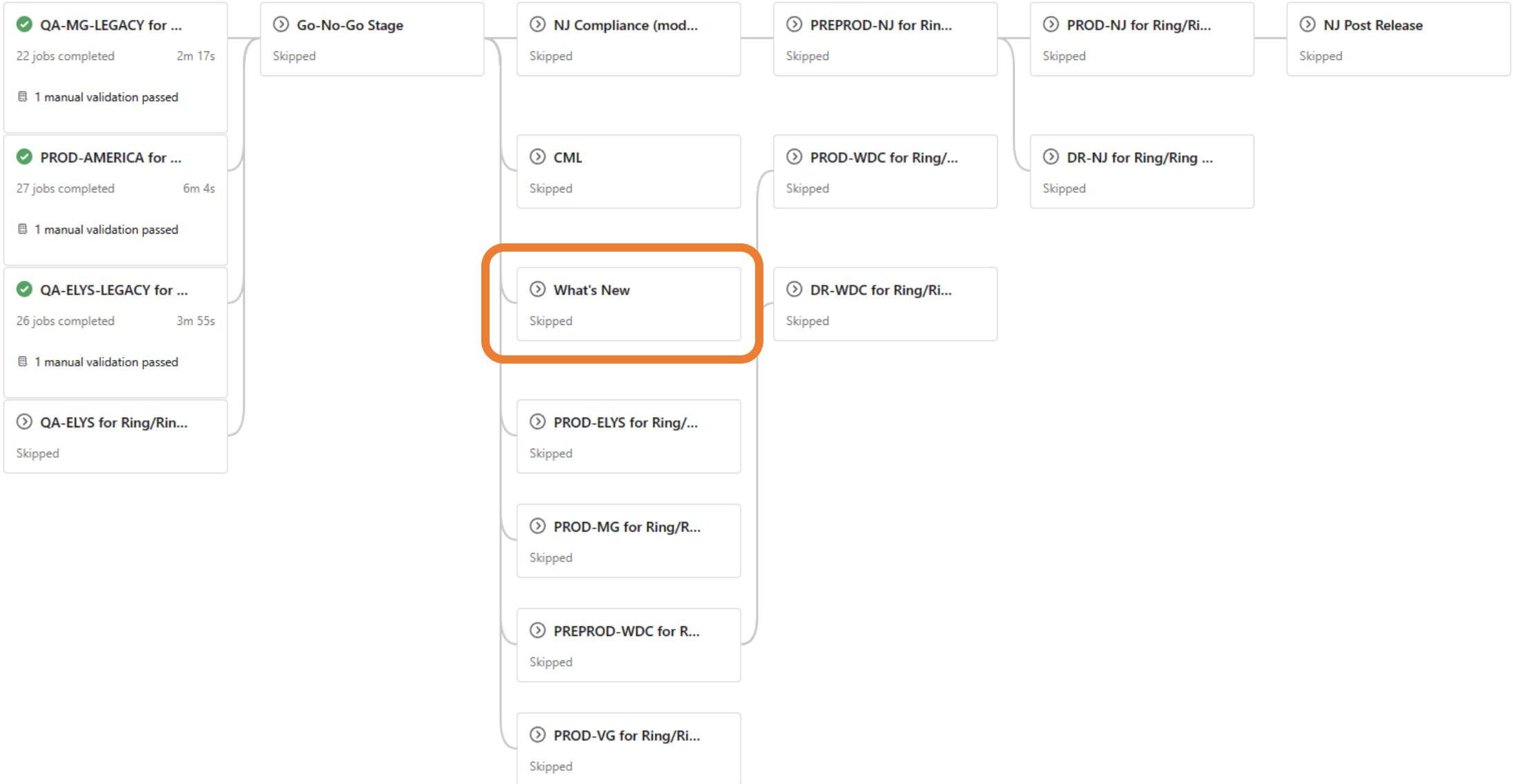
Controlli pacchetti beta



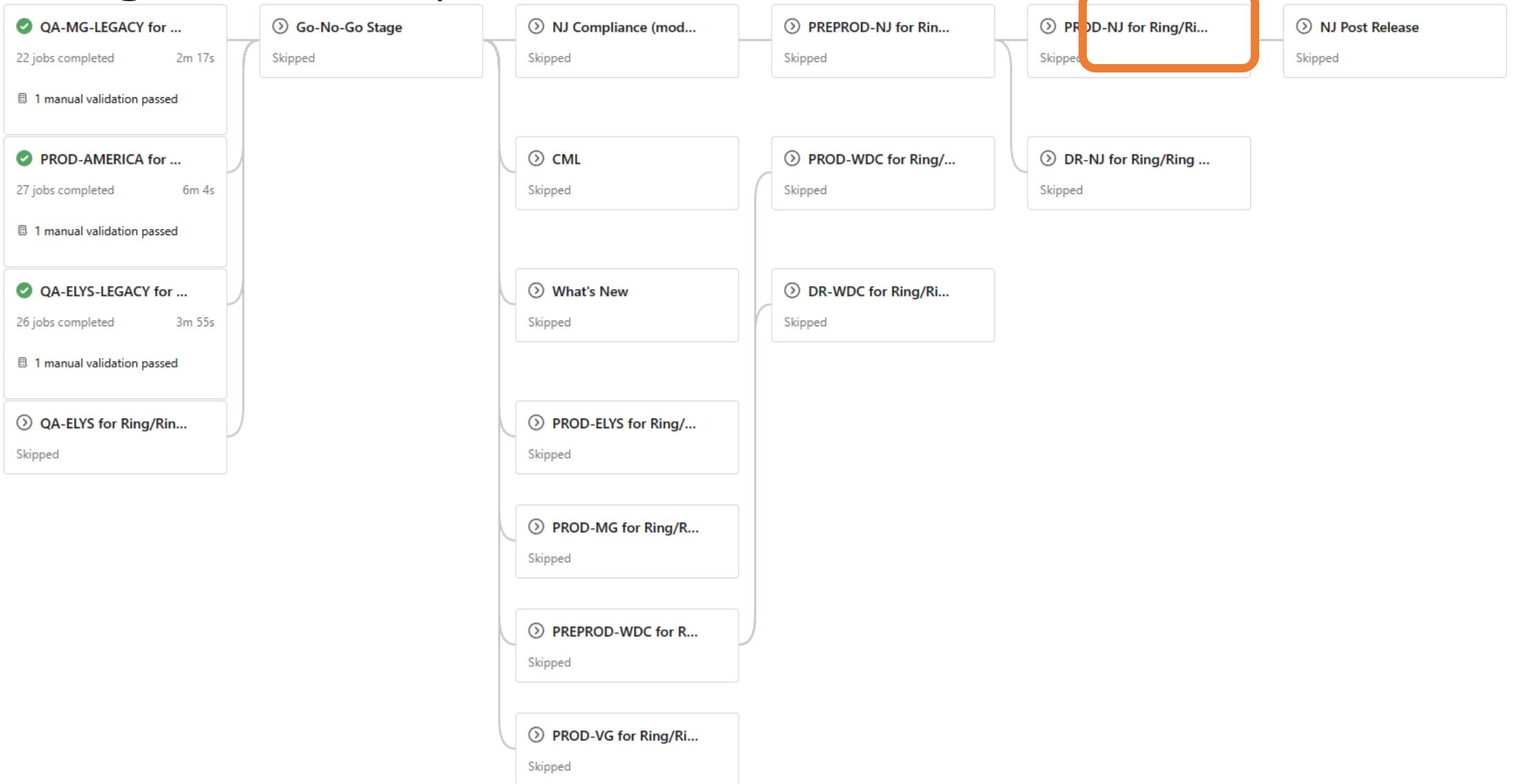
Attività di compliance



Release note



Progressive exposure



Idempotenza - DSC

 QA-MG-LEGACY for ...	
22 jobs completed	2m 17s
 1 manual validation passed	
 PROD-AMERICA for ...	↻
27 jobs completed	6m 4s
 1 manual validation passed	
 QA-ELYS-LEGACY for ...	
26 jobs completed	3m 55s
 1 manual validation passed	

Idempotenza - DSC– matrice dinamica

```
- job: applicationActivities
  displayName: App
  dependencies:
    - bomFilteringJob
  preDeploymentScriptActivities
  pool: ${{ parameters.agentPoolForOctopus }}
  condition: and(succeeded(), ne(dependencies.bomFilteringJob.outputs['setProjectMatrix.projects'],''))
  strategy:
    matrix: ${ dependencies.bomFilteringJob.outputs['setProjectMatrix.projects'] }
  steps:
```

Storia

Repo «Release Orchestrator» a release-branch.

Branches		Commits		Last Commit		Build Status	
Mine	All	Stale					
>  dpiccinini							
>  miferrac							
✓  release							
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104
105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128
129	130	131	132	133	134	135	136
137	138	139	140	141	142	143	144
145	146	147	148	149	150	151	152
153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168
169	170	171	172	173	174	175	176
177	178	179	180	181	182	183	184
185	186	187	188	189	190	191	192
193	194	195	196	197	198	199	200
201	202	203	204	205	206	207	208
209	210	211	212	213	214	215	216
217	218	219	220	221	222	223	224
225	226	227	228	229	230	231	232
233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248
249	250	251	252	253	254	255	256
257	258	259	260	261	262	263	264
265	266	267	268	269	270	271	272
273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288
289	290	291	292	293	294	295	296
297	298	299	300	301	302	303	304
305	306	307	308	309	310	311	312
313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328
329	330	331	332	333	334	335	336
337	338	339	340	341	342	343	344
345	346	347	348	349	350	351	352
353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368
369	370	371	372	373	374	375	376
377	378	379	380	381	382	383	384
385	386	387	388	389	390	391	392
393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408
409	410	411	412	413	414	415	416
417	418	419	420	421	422	423	424
425	426	427	428	429	430	431	432
433	434	435	436	437	438	439	440
441	442	443	444	445	446	447	448
449	450	451	452	453	454	455	456
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465	466	467	468	469	470	471	472
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537	538	539	540	541	542	543	544
545	546	547	548	549	550	551	552
553	554	555	556	557	558	559	560
561	562	563	564	565	566	567	568
569	570	571	572	573	574	575	576
577	578	579	580	581	582	583	584
585	586	587	588	589	590	591	592
593	594	595	596	597	598	599	600
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641	642	643	644	645	646	647	648
649	650	651	652	653	654	655	656
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7021	7022	7023	7024	7025	7026	7027	7028
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7034	7035	7036	7037	7038	7039	7030	7031
7032	7033	7034	7035	7036	7037	7038	7039
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7028	7029	7030	7031	7032	7033	7034	7035
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7018	7019	7020	7021	7022	7023	7024	7025
7016	7017	7018	7019	7020	7021	7022	7023
7014	7015	7016	7017	7018	7019	7020	7021
7012	7013	7014	7015	7016	7017	7018	7019
7010	7011	7012	7013	7014	7015	7016	7017
7008	7009	7010	7011	7012	7013	7014	7015
7006	7007	7008	7009	7010	7011	7012	7013
7004	7005	7006	7007	7008	7009	7010	7011
7002	7003	7004	7005	7006	7007	7008	7009
7000	7001	7002	7003	7004	7005	7006	7007
6998	6999	7000	7001	7002	7003	7004	7005
6996	6997	6998	6999	7000	7001	7002	7003
6994	6995	6996	6997	6998	6999	7000	7001
6992	6993	6994	6995	6996	6997	6998	6999
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6986	6987	6988	6989	6990	6991	6992	6993
6984	6985	6986	6987	6988	6989	6990	6991
6982	6983	6984	6985	6986	6987	6988	6989
6980	6981	6982	6983	6984	6985	6986	6987
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6970	6971	6972	6973	6974	6975	6976	6977
6968	6969	6970	6971	6972	6973	6974	6975
6966	6967	6968	6969	6970	6971	6972	6973
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6936	6937	6938	6939	6940	6941	6942	6943
6934	6935	6936	6937	6938	6939	6940	6941
6932	6933	6934	6935	6936	6937	6938	6939
6930	6931	6932	6933	6934	6935	6936	6937
6928	6929	6930	6931	6932	6933		

Vantaggi aggiuntivi

A distanza di mesi recuperato un ambiente dismesso e aggiornato con sBOM voluta.

«Reset» di un ambiente dopo interventi manuali.

Provisioning di ambienti nuovi (es.: Ohio)



Demo

Raptor +

Overview

Boards

Repos

Files

Commits

Pushes

Branches

Tags

Pull requests

Advanced Security

Pull Request Manager Hub

Pipelines

Test Plans

Artifacts

Bravo Notes

Branches

New branch

Mine All Stale

Search branch name

Branch	Commit	Author	Authored Date	Behind Ahead	Status	Pull Request
master Default Compare	ec92bea6	Michele Ferracin	Aug 1	succeeded		

A photograph of an elderly couple standing in what appears to be a restaurant or cafe. The woman, on the left, has short dark hair and wears glasses, a light-colored cable-knit sweater, and a dark denim apron. She is laughing heartily. The man, on the right, wears dark-rimmed glasses, a white long-sleeved shirt, a dark green patterned tie, and a dark denim apron. He is also laughing. They are positioned in front of a window that looks out onto a city street at night, with blurred lights visible. In the bottom left corner, there are two overlapping solid-colored triangles: a pink one pointing right and a teal one pointing up.

Al servizio dell'impresa

Al servizio dell'impresa

Pipeline non solo per artefatti «informatici»

Log di cosa è stato rilasciato, dove e quando (audit)

Rimozione manualità da attività extra (compliance)

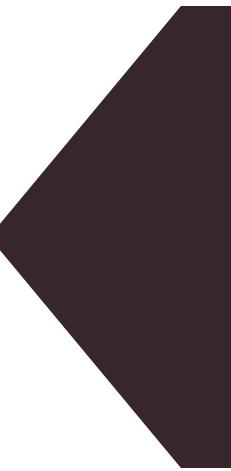
Riduzione errori e tempi (customer)

Processo (la pipeline guida le attività e i momenti).





Q&A





Grazie!!!

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