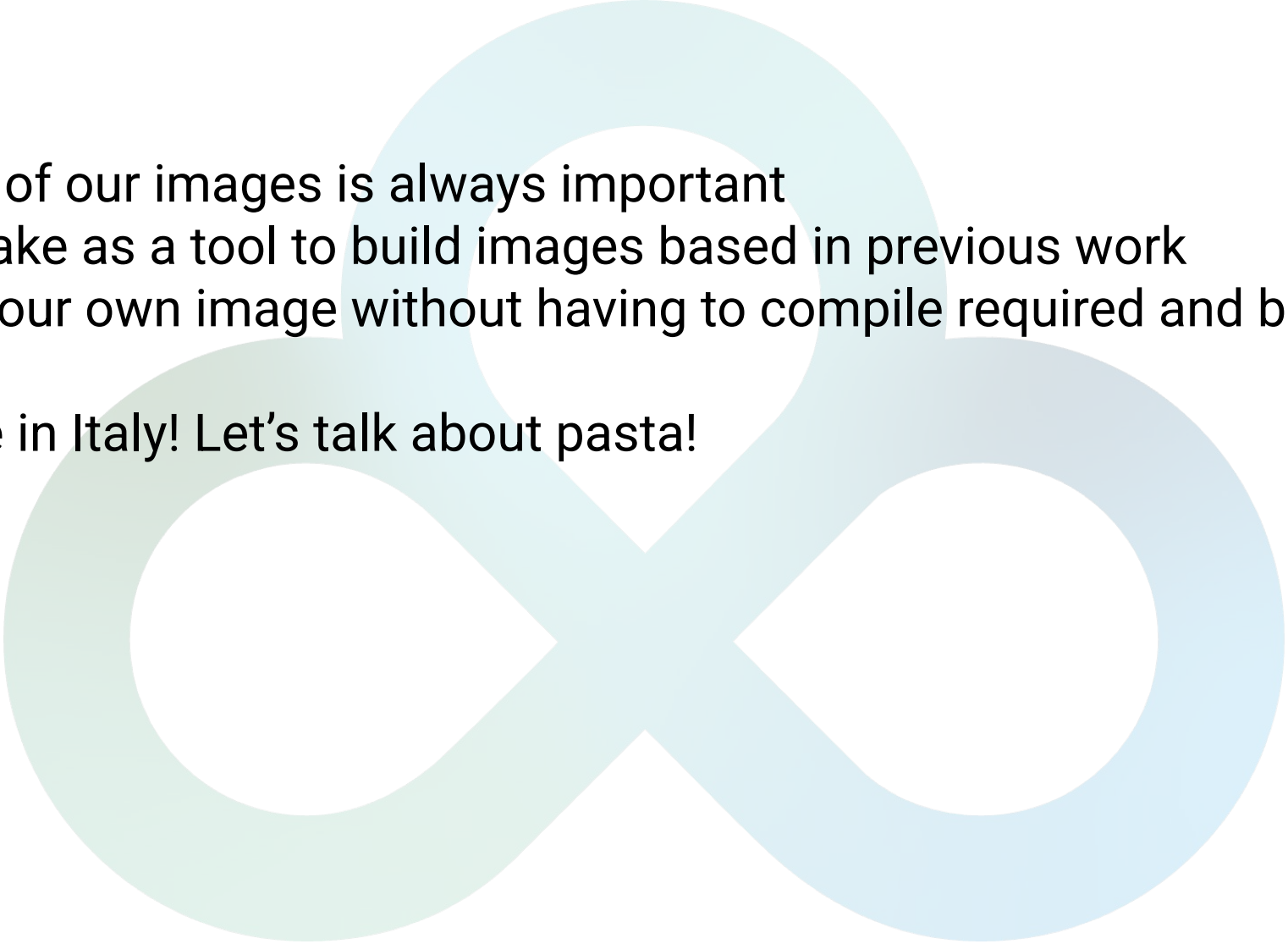




Baking Better Postgres Images with Docker Bake

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PGDay Napoli

- 
- The base of our images is always important
 - Docker Bake as a tool to build images based in previous work
 - Prepare your own image without having to compile required and base work
 - And we're in Italy! Let's talk about pasta!

- It's just a Carbonara without egg, pecorino and pepper



A base image is the pasta of images

FROM debian:trixie-slim



Let's add some pecorino!

```
target "myimage" {  
  matrix = {  
    tgt = [  
      "myimage"  
    ]  
    pgVersion = [  
      "16.9",  
      "17.5",  
    ]  
  }  
  name = "postgresql-${index(split(".",cleanVersion(pgVersion)),0)}-standard-bookworm"  
  target = "${tgt}"  
  args = {  
    BASE_IMAGE = \  
      "ghcr.io/cloudnative-pg/postgresql:${cleanVersion(pgVersion)}-standard-bookworm",  
    EXTENSIONS = "${getExtensionsString(pgVersion, extensions)}",  
  }  
}
```

Let's add some pepe!

```
extensions = [  
    "pgvector",  
]  
target "myimage" {  
    dockerfile-inline = <<EOT  
ARG BASE_IMAGE="ghcr.io/cloudnative-pg/postgresql:16.9-standard-bookworm"  
FROM $BASE_IMAGE AS myimage  
ARG EXTENSIONS  
USER root  
RUN apt-get update && \  
    apt-get install -y --no-install-recommends $EXTENSIONS && \  
    apt-get purge -y --auto-remove -o APT::AutoRemove::RecommendsImportant=false && \  
    rm -rf /var/lib/apt/lists/* /var/cache/* /var/log/*  
USER 26  
EOT  
.....  
}
```

Now we have our cacio e pepe!

```
docker buildx bake \  
-f docker-bake.hcl \  
-f cwd://bake.hcl \  
"https://github.com/cloudnative-pg/postgres-  
containers.git" \  
myimage \  
-push
```



Now some yolk and pancetta

```
extensions = [  
    "pgvector",  
    "partman",  
    "squeeze",  
]  
target "myimage" {  
    matrix = {  
....  
        target = "${tgt}"  
        platforms = ["linux/arm64"]  
....
```



But we can also add pomodoro and pancetta

```
extensions = [  
    "pgvector",  
]  
target "myimage" {  
    matrix = {  
    ....  
    target = "${tgt}"  
    platforms = ["linux/arm64","linux/s390x"]  
    attest = [{"disabled": true,"type": "provenance"}]  
    ....  
}
```



A base image is the pasta of images

FROM debian:trixie-slim




Different images, tags and platforms made easy

- One bake file to rule them all? Probably no but useful
- You can always overwrite your own files
- Share the recipe!

Thank you

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-
- cloudnative-pg.io
 - CNCF Slack
 - linkedin.com/company/cloudnative-pg
 - mastodon.social/@CloudNativePG
 - bsky.app/profile/cloudnativepg.bsky.social

 **CloudNativePG**

< September 2025 >

Mo	Tu	We	Th	Fr	Sa	Su
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	1	2	3	4	5

Projects

1 projects ×

☒ CloudNativePG

iCal

Today

< October 2025 >

Day

4 Days

Week

Month

List

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
29	30	1	2	3	4	5
			4p CloudN			
6	7	8	9	10	11	12
13	14	15	16	17	18	19
		4p CloudN				
20	21	22	23	24	25	26
			4p CloudN			
27	28	29	30	31	1	2
3	4	5	6	7	8	9