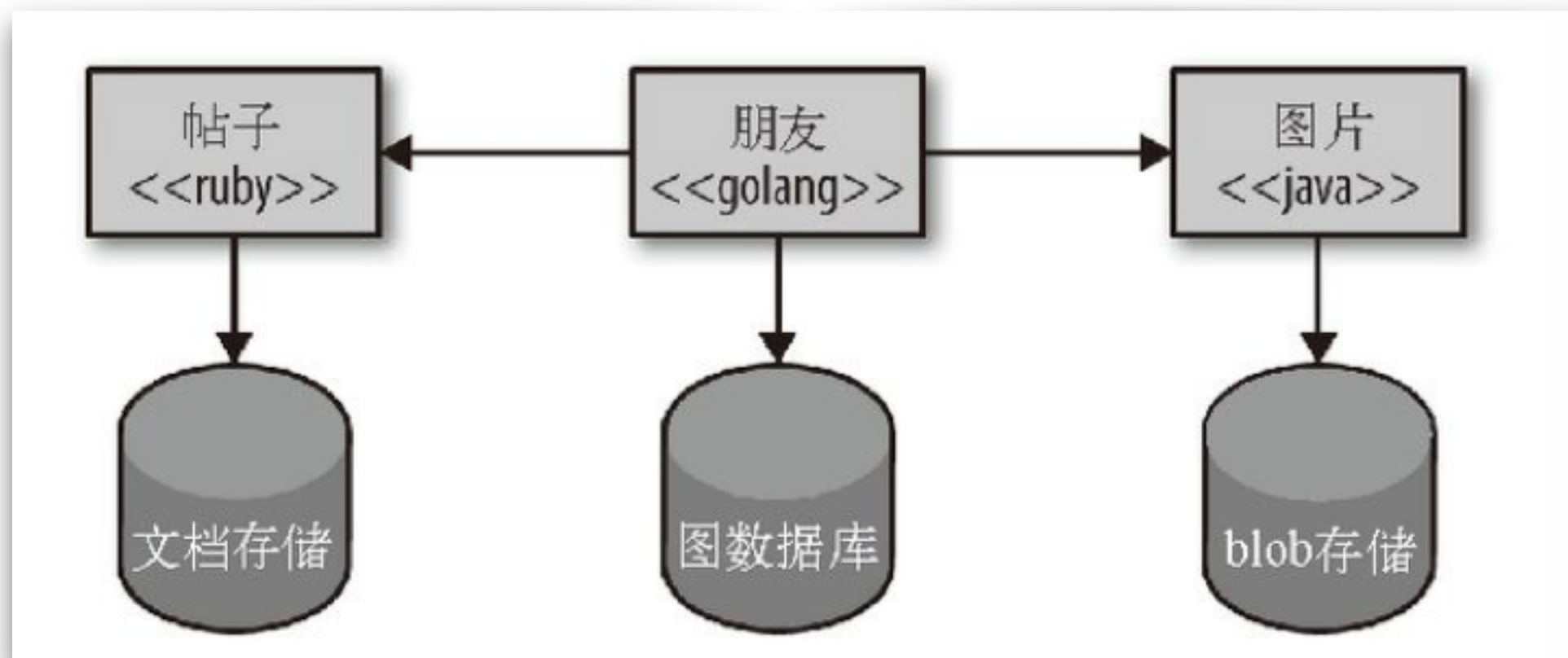# 微服务简介

什么是微服务

  很小，专注与做一件事　　单一职责原则

  自治性　彼此独立修改部署

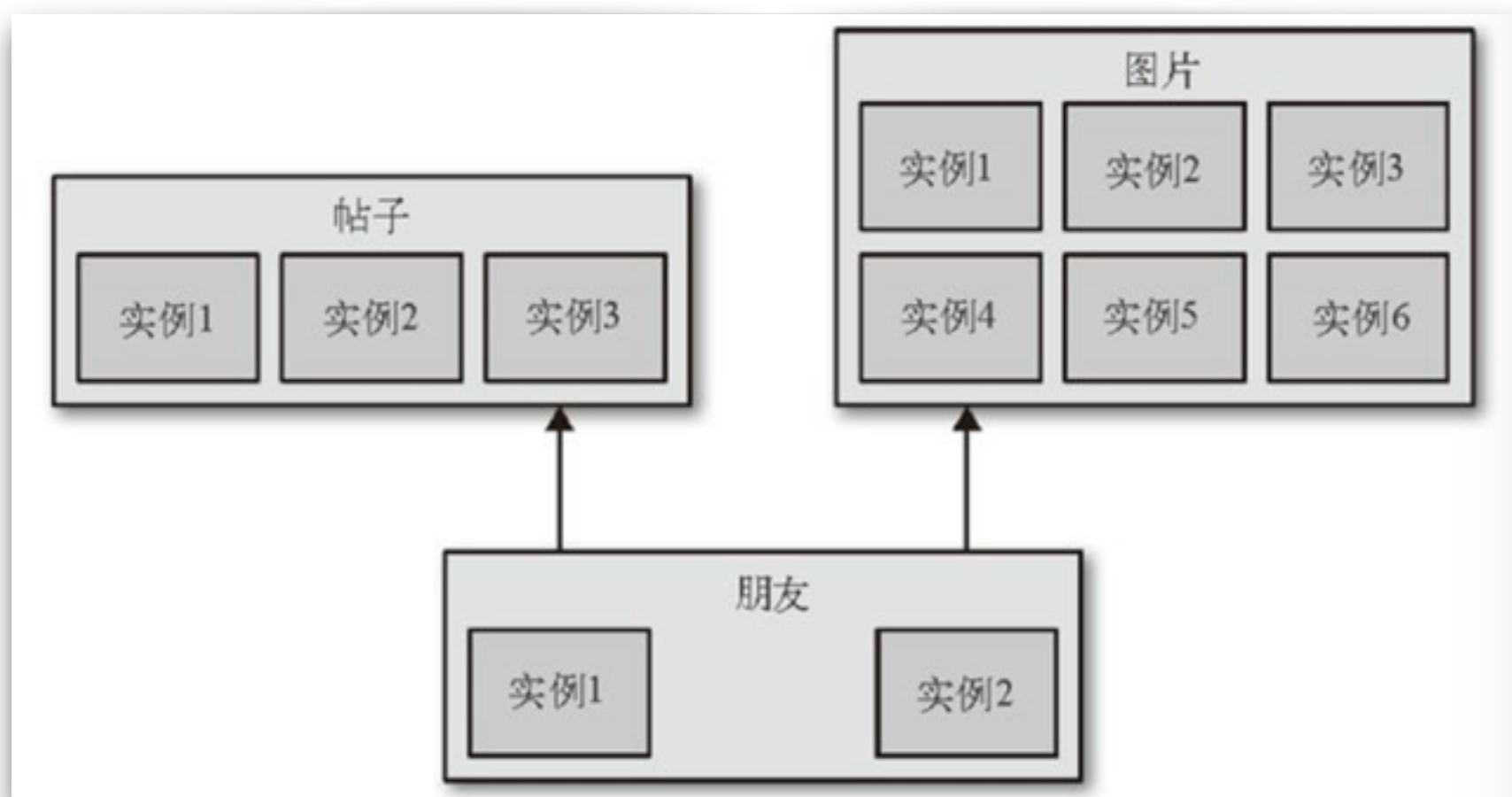# 微服务简介
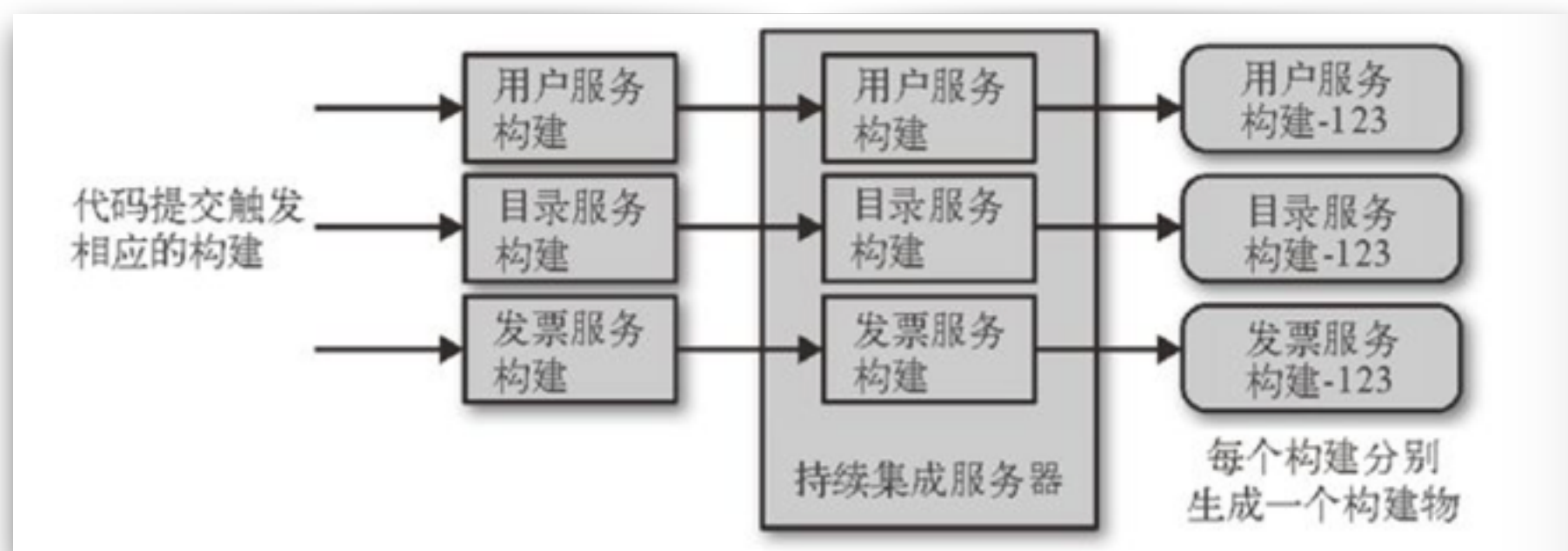
主要好处

技术异构性

微服务简介

主要好处

弹性扩展

微服务简介

主要好处

简化部署

微服务简介

主要好处

组织结构匹配

任何组织在设计一套系统（广义概念上的系统）时，所交付的设计方案在结构上都与该组织的沟通架构保持一致。

organizations which design systems … are constrained to produce designs which are copies of the communication structures of these organizations

"— M. Conway"

https://en.wikipedia.org/wiki/Conway%27s_law

微服务简介

主要好处

  可重用，可组合

  持续改进优化

.NET CORE

https://github.com/dotnet

.NET CORE

https://www.microsoft.com/net/core#ubuntu

```
sudo sh -c 'echo "deb [arch=amd64] https://ap
t-mo.trafficmanager.net/repos/dotnet/ trusty
main" > /etc/apt/sources.list.d/dotnetdev.lis
t'

sudo apt-key adv --keyserver apt-mo.trafficma
nager.net --recv-keys 417A0893

sudo apt-get update

sudo apt-get install dotnet-dev-1.0.0-preview
1-002702
```

.NET CORE

https://www.microsoft.com/net/core#ubuntu

```
mkdir hwapp

cd hwapp

dotnet new
```

```
dotnet restore

dotnet run
```

ASP.NET CORE

ASP.NET CORE

Convert the Console App into an ASP.NET Core App

To modify this program to be an ASP.NET Core app, you need to add a dependency. Open *project.json* in your editor and add a dependency on "Microsoft.AspNetCore.Server.Kestrel", as shown:

```json
{
  "version": "1.0.0-*",
  "buildOptions": {
    "emitEntryPoint": true
  },
  "dependencies": {
    "Microsoft.NETCore.App": {
      "type": "platform",
      "version": "1.0.0-rc2-3002702"
    },
    "Microsoft.AspNetCore.Server.Kestrel":"1.0.0-rc2-final"
  },
  "frameworks": {
    "netcoreapp1.0": {
      "imports": "dnxcore50"
    }
  }
}
```

Once more, restore the project's dependencies (so that this new dependency is downloaded):

```
> dotnet restore
```

ASP.NET CORE

https://github.com/dotnet/training-tutorials/blob/master/content/
asp.net/getting-started/lesson-01.md

```
public class Program
{
    public static void Main(string[] args)
    {
        var host = new WebHostBuilder()
            .UseKestrel()
            .UseStartup<Startup>()
            .Build();

        host.Run();
    }
}
```

ASP.NET CORE

```csharp
public class Startup
{
    public void Configure(IApplicationBuilder app)
    {
        app.Run(context =>
        {
            return context.Response.WriteAsync("Hello from ASP.NET Core!");
        });
    }
}
```

DOCKER 部署

https://c.163.com/

FROM hub.c.163.com/cnxiaoma/dotnet:latest
RUN git clone https://git.coding.net/cnxiaoma/aspnetcore.git /aspnetcore
WORKDIR /aspnetcore
RUN dotnet restore
EXPOSE 3000
CMD ["dotnet", "run"]

http://t.cn/R5SG2kF

欢迎提问