Deploying every* Phoebus service on a single machine with EPNix

*Well, not exactly *every* service, but close enough…

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  - Most with the budget for only one physical machine
- For our Phoebus developers, to test their developments against deployed services
- For our newcomers, to test using the various Phoebus client features inside a realistic™ environment

General configuration

```
{
  networking.hostName = "phoebus-ecosystem";
  users.users.root.initialHashedPassword = "";

  services.openssh = {
    enable = true;
    settings = {
      PermitRootLogin = "yes";
      PermitEmptyPasswords = "yes";
    };
  };
  security.pam.services.sshd.allowNullPassword = true;
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Archiver Appliance

```
{
  services.archiver-appliance = {
    enable = true;
    stores.lts.location = "/srv/lts";
    stores.mts.location = "/srv/mts";
  };
}
```

Phoebus services

```
{
  services = {

    phoebus-olog = {
      enable = true;
      settings = {
        "server.http.enable" = true;
        "server.http.port" = 8083;
        "demo_auth.enabled" = true;
      };
    };
```

```
phoebus-alarm-server = {
  enable = true;
  settings."org.phoebus.applications.alarm/server" = kafkaAddr;
};

phoebus-alarm-logger.settings = {
  "server.port" = 8081;
  "bootstrap.servers" = kafkaAddr;
};

phoebus-save-and-restore = {
  enable = true;
  settings = {
    "server.port" = 8082;
    "auth.impl" = "demo";
  };
};
```

```
channel-finder = {
  enable = true;
  settings = {
    "server.http.port" = 8084;
    "demo_auth.enabled" = true;
  };
};

recceiver = {
  enable = true;
  channelfinderapi.DEFAULT = {
    BaseURL = "http://localhost:8084/ChannelFinder";
    username = "admin";  password = "adminPass";
  };
  settings = { ... };
};
```

```
    # Kafka & Elasticsearch configuration omitted
    # for brevity's sake…
  };
}
```

Example IOC

```
{
  services.iocs.exampleIoc = {
    package = myExampleIocPackage;
    workingDirectory = "iocBoot/iocExample";
  };

  environment.epics = {
    ca_addr_list = [ "127.0.0.1" ];
    ca_auto_addr_list = false;
  };
}
```

RAM usage

```
{
  services.apache-kafka.jvmOptions = [ "-Xmx256m" ];
  services.elasticsearch.extraJavaOptions = [ "-Xmx256m" ];
  services.tomcat.javaOpts = "-Xmx256m";

  swapDevices = [ {
    device = "/var/swapfile";
    size = 2048; # MiB
  } ];

  boot.kernel.sysfs.module.zswap.parameters.enabled = true;
}
```

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  - …