



Udviklervenlig caching i ASP.NET

AppFabric Distributed Cache

Mig mig mig

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Agenda

- Caching kort
- Distribueret caching, kortere
- AppFabric Caching
- Eksempler: AppFabric Cache og ASP.NET (MVC)
 - Session State
 - Alm. Caching
 - Output Caching
 - NHibernate 2nd level caching



Caching kort



<http://www.flickr.com/photos/kloppster/4214127366/>



<http://www.flickr.com/photos/scoobymoo/68280399/>



Caches or food
caches are **stores** of
food made by many
species of animals for
future consumption



They are usually
hidden from the sight
of competing
individuals of the
same species as well
as others



Many species will
spread the caches
across multiple
locations so as to
reduce total loss from
pilferage



Distribueret Caching



Fordele

- Skalerbarhed
- Availability
- Out-of-proc caching
- Persistente sessions

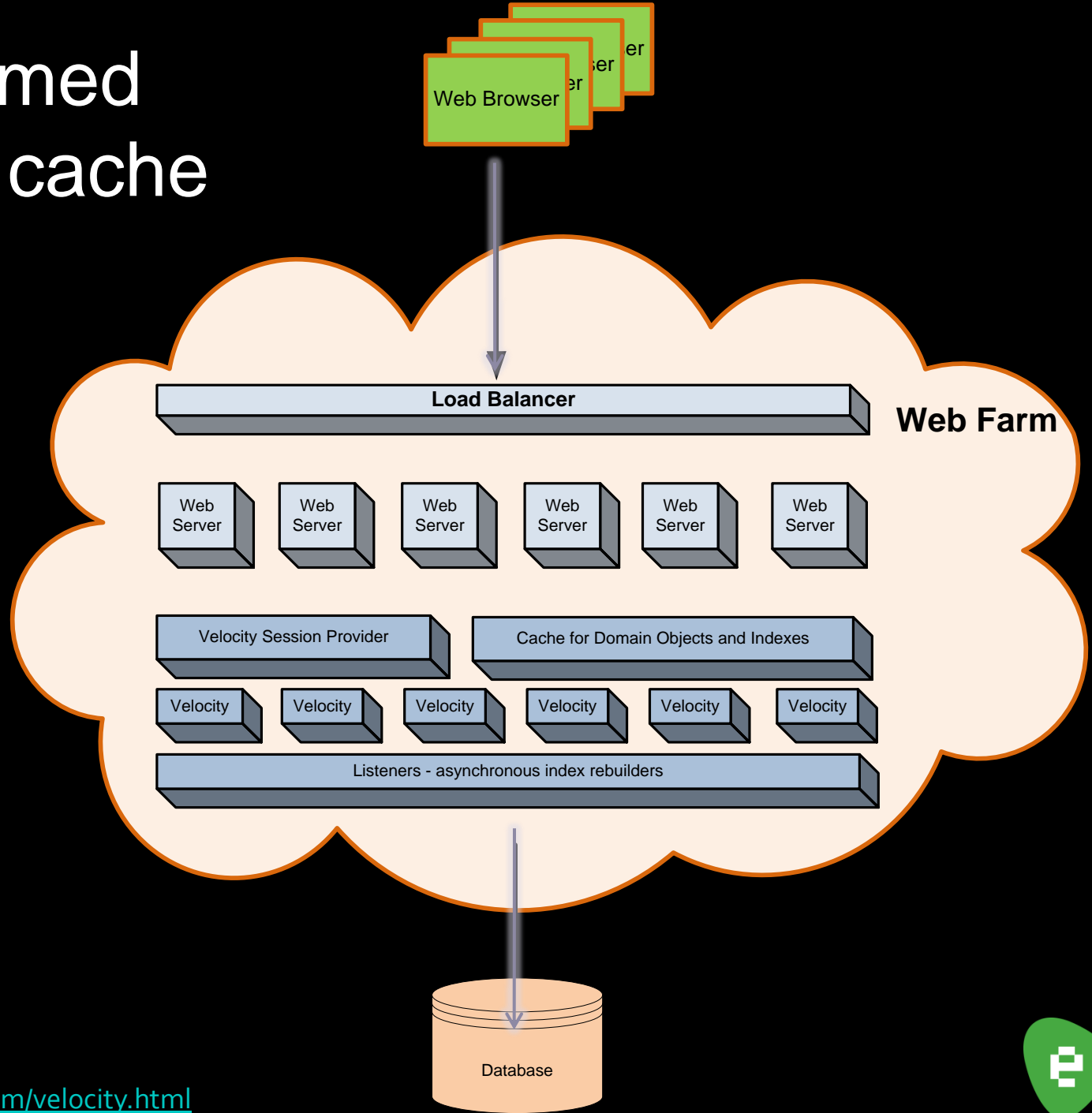


Distribueret Caching i .NET

- Temmelig late to the party (som altid)
- Eksempler
 - MemcacheD
 - SharedCache (open source)
 - NCache (kommerciel, gratis single node version)



Arkitektur med distribubret cache

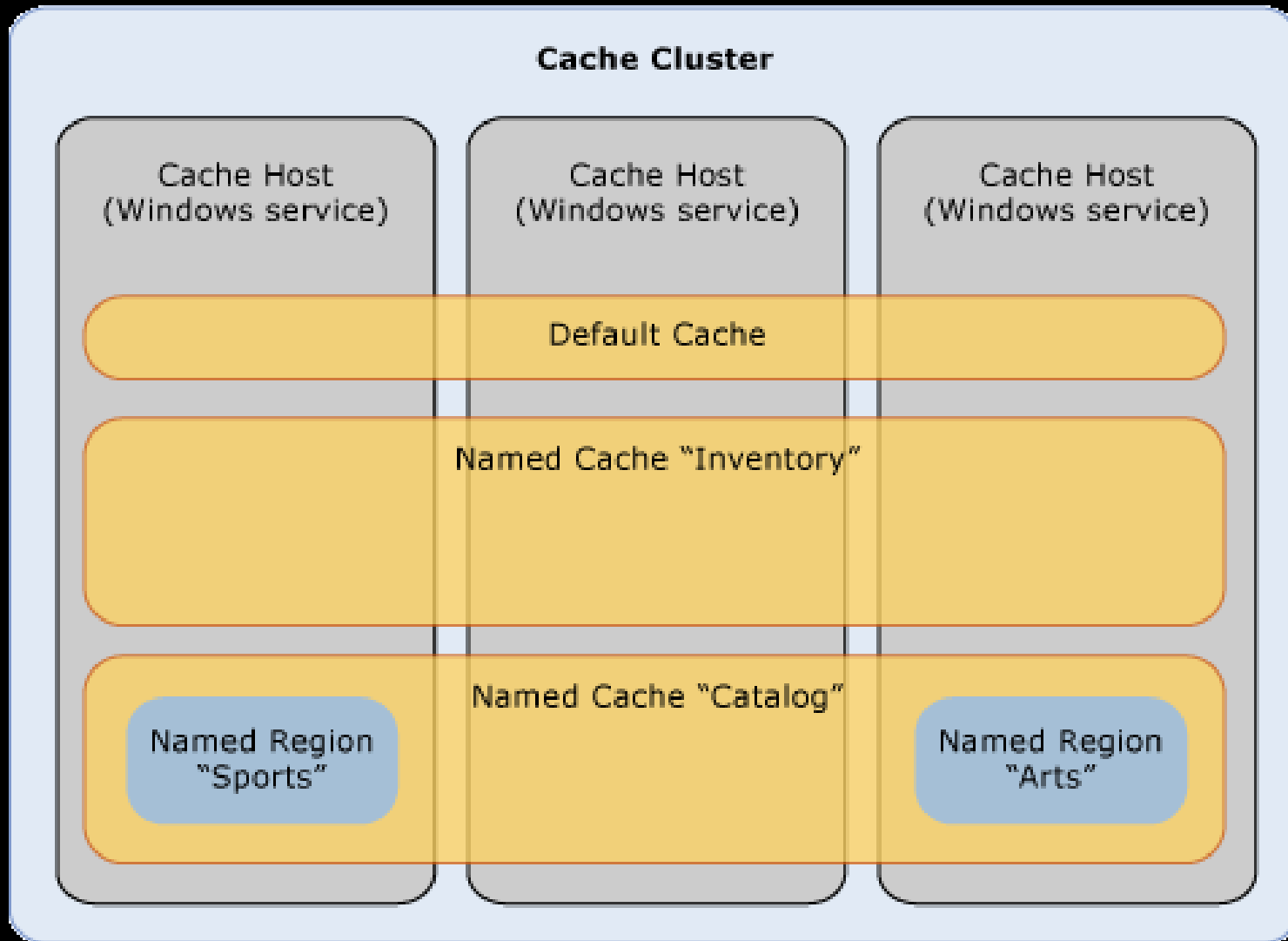


AppFabric Distributed Cache

- Del af Windows Server AppFabric, MSFT application-server stack
- På vej ind i skyen m Azure og venner



Logisk arkitektur



AppFabric features

- Named caches
- Regions
- Tags
- Local cache
- High Availability Mode





Eksempler i ASP.NET

Demotime!

<http://localhost:52443/>

Session State Cache

- Overlever app restarts / updates
- Ingen flaskehals i Session State Service eller Sql Server



Alm. Caching

- Wrapper om AppFabrics DataCache client
- A) Eget interface (demo)
- B) Implementer
`System.Runtime.Caching.ObjectCache`



Output Caching Provider

- Den output caching provider, som microsoft har lovet, er endnu ikke kommet.



PowerShell Cache Cmdlets

- `[start|stop|restart]-cachecluster`
 - Siger vist sig selv
- `get-cachestatistics [cachename]`
 - Item count, size, requests og misses
- `get-cachehostconfig [hostname] [port]`
 - Hvordan er den pågældende host konfigureret.
- `get-cacheregion`
 - Giver oversigt over regioner



Logging

Aktivering af logging

- `PS>set-cachelogging Verbose \temp\appfabric`

Tail!

- `C:\>tail -f \temp\appfabric.log`



Ressourcer

- Dokumentation: [http://msdn.microsoft.com/en-us/library/ff383731\(v=MSDN.10\).aspx](http://msdn.microsoft.com/en-us/library/ff383731(v=MSDN.10).aspx)
- AppFabric Team blog: <http://blogs.msdn.com/b/endpoint/>
- AppFabric Caching forum: <http://social.msdn.microsoft.com/Forums/en-US/velocity>
- PowerShell caching cmdlets: [http://msdn.microsoft.com/en-us/library/ff428185\(v=WS.10\).aspx](http://msdn.microsoft.com/en-us/library/ff428185(v=WS.10).aspx)
- Grid Dynamics whitepaper om codename Velocity (grundig med benchmarks): <http://www.griddynamics.com/velocity.html>





Spørgsmål?

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