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# **Natural Key Cache Documentation**

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Natural Key Cache (NKC) is a custom Django Manager for easily caching objects by their natural keys. If you have code that often calls `Model.objects.get`, this will help make those lookups faster. However if you often call `Models.objects.filter`, it will not help. In the latter case use a more robust caching Managers like [Django Cache Manager](#).

The NKC aims to be more efficient by sacrificing the features and robustness of other cache Managers. In order to cache any and all database lookups for a model, other cache Managers incur additional overhead. While still being faster than a database query, this overhead causes lookups to be slower than a simple `cache.get`. By only performing single object lookups based on natural keys, the NKC can avoid much of this overhead.



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## Simple Example

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To start using the NKC, define a new manager on a model.

```
from django.db import models
from natural_key_cache.cache_manager import NaturalKeyCacheManager

class MyModel(models.Model):
    # Define natural keys, this can be omitted if id/pk is the natural key
    natural_keys = (
        'nat_key',
    )
    cache = NaturalKeyCacheManager(natural_keys)
    nat_key = models.CharField(max_length=32, unique=True)
```

Then access the cached model via the new manager.

```
MyModel.cache.get(nat_key='unique_instance')
```





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## Indices and tables

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