# DocumentDB .NET 示例

[AZURE.SELECTOR] - [.NET 示例](/documentation/articles/documentdb-dotnet-samples) - [Node.js 示例](/documentation/articles/documentdb-nodejs-samples) - [Python 示例](/documentation/articles/documentdb-python-samples) - [Azure 代码示例库](https://azure.microsoft.com/documentation/samples/?service=documentdb)

[azure-documentdb-net](https://github.com/Azure/azure-documentdb-net/tree/master/samples/code-samples) GitHub 存储库中包含可对 DocumentDB 资源执行 CRUD 操作和其他常见操作的示例解决方案。本文将提供：

* 每个示例 C# 项目文件中各项任务的链接。
* 指向相关的 API 参考内容的链接。

**先决条件**

1. 你必须要有 Azure 帐户才能使用这些 NoSQL 示例：
   * 可以[免费建立一个 Azure 帐户](/pricing/free-trial/)：获取可用来试用付费版 Azure 服务的信用额度，甚至在用完信用额度后，你仍可以保留帐户和使用免费的 Azure 服务（如网站）。你的信用卡将永远不会付费，除非你显式更改设置并要求付费。

* 你可以[激活 Visual Studio 订户权益](/pricing/member-offers/msdn-benefits-details/)：Visual Studio 订阅每月为你提供可用来试用付费版 Azure 服务的信用额度。

1. 你也需要 [Microsoft.Azure.DocumentDB NuGet 程序包](http://www.nuget.org/packages/Microsoft.Azure.DocumentDB/)。

[AZURE.NOTE] 每个示例都是独立的，自行对自身进行设置并在完成后自行进行清理。同样地，这些示例对 CreateDocumentCollectionAsync() 发出多个调用。每当执行此操作时，即会根据所创建的集合的性能层，对你的订阅收取使用 1 小时的费用。

## 数据库示例

DatabaseManagement 项目示例的 [RunDatabaseDemo](https://github.com/Azure/azure-documentdb-dotnet/blob/530c8d9cf7c99df7300246da05206c57ce654233/samples/code-samples/DatabaseManagement/Program.cs#L72-L121) 方法演示如何执行以下任务。

|  |  |
| --- | --- |
| 任务 | API 参考 |
| [创建数据库](https://github.com/Azure/azure-documentdb-dotnet/blob/530c8d9cf7c99df7300246da05206c57ce654233/samples/code-samples/DatabaseManagement/Program.cs#L90) | [DocumentClient.CreateDatabaseAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createdatabaseasync.aspx) |
| [查询数据库帐户](https://github.com/Azure/azure-documentdb-dotnet/blob/530c8d9cf7c99df7300246da05206c57ce654233/samples/code-samples/DatabaseManagement/Program.cs#L81) | [DocumentQueryable.CreateDatabaseQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdatabasequery.aspx) |
| [按 ID 读取数据库](https://github.com/Azure/azure-documentdb-dotnet/blob/530c8d9cf7c99df7300246da05206c57ce654233/samples/code-samples/DatabaseManagement/Program.cs#L102) | [DocumentClient.ReadDatabaseAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdatabaseasync.aspx) |
| [列出帐户的数据库](https://github.com/Azure/azure-documentdb-dotnet/blob/530c8d9cf7c99df7300246da05206c57ce654233/samples/code-samples/DatabaseManagement/Program.cs#L108-L113) | [DocumentClient.ReadDatabaseFeedAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdatabasefeedasync.aspx) |
| [删除数据库](https://github.com/Azure/azure-documentdb-dotnet/blob/530c8d9cf7c99df7300246da05206c57ce654233/samples/code-samples/DatabaseManagement/Program.cs#L118) | [DocumentClient.DeleteDatabaseAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.deletedatabaseasync.aspx) |

## 集合示例

CollectionManagement 项目示例的 [RunCollectionDemo](https://github.com/Azure/azure-documentdb-dotnet/blob/530c8d9cf7c99df7300246da05206c57ce654233/samples/code-samples/CollectionManagement/Program.cs#L96-L185) 方法演示如何执行以下任务。

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| 任务 | API 参考 |
| [创建集合](https://github.com/Azure/azure-documentdb-dotnet/blob/89670bc8aefd9bdd932db7f9b6d2fcb9b6acf35e/samples/code-samples/CollectionManagement/Program.cs#L101) | [DocumentClient.CreateDocumentCollectionAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createdocumentcollectionasync.aspx) |
| [获取集合的性能层](https://github.com/Azure/azure-documentdb-dotnet/blob/89670bc8aefd9bdd932db7f9b6d2fcb9b6acf35e/samples/code-samples/CollectionManagement/Program.cs#L130) | [DocumentQueryable.CreateOfferQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createofferquery.aspx) |
| [更改集合的性能层](https://github.com/Azure/azure-documentdb-dotnet/blob/89670bc8aefd9bdd932db7f9b6d2fcb9b6acf35e/samples/code-samples/CollectionManagement/Program.cs#L142-L143) | [DocumentClient.ReplaceOfferAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.replaceofferasync.aspx) |
| [按 ID 获取集合](https://github.com/Azure/azure-documentdb-dotnet/blob/89670bc8aefd9bdd932db7f9b6d2fcb9b6acf35e/samples/code-samples/CollectionManagement/Program.cs#L153) | [DocumentClient.ReadDocumentCollectionAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdocumentcollectionasync.aspx) |
| [在数据库中读取所有集合的列表](https://github.com/Azure/azure-documentdb-dotnet/blob/89670bc8aefd9bdd932db7f9b6d2fcb9b6acf35e/samples/code-samples/CollectionManagement/Program.cs#L162) | [DocumentClient.ReadDocumentCollectionFeedAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdocumentcollectionfeedasync.aspx) |
| [删除集合](https://github.com/Azure/azure-documentdb-dotnet/blob/89670bc8aefd9bdd932db7f9b6d2fcb9b6acf35e/samples/code-samples/CollectionManagement/Program.cs#L175) | [DocumentClient.DeleteDocumentCollectionAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.deletedocumentcollectionasync.aspx) |

## 文档示例

DocumentManagement 项目示例的 [RunDocumentsDemo](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L97-L102) 方法演示如何执行以下任务。

|  |  |
| --- | --- |
| 任务 | API 参考 |
| [创建文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L198) | [DocumentClient.CreateDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createdocumentasync.aspx) |
| [按 ID 读取文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L211) | [DocumentClient.ReadDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdocumentasync.aspx) |
| [读取集合中的所有文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L227) | [DocumentClient.ReadDocumentFeedAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdocumentfeedasync.aspx) |
| [查询文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L248-L251) | [DocumentClient.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [替换文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L263) | [DocumentClient.ReplaceDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.replacedocumentasync.aspx) |
| [更新插入文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L300) | [DocumentClient.UpsertDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.upsertdocumentasync.aspx) |
| [删除文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L322) | [DocumentClient.DeleteDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.deletedocumentasync.aspx) |
| [使用 .NET 动态对象](https://github.com/Azure/azure-documentdb-dotnet/blob/f374cc601f4cf08d11c88f0c3fa7dcefaf7ecfe8/samples/code-samples/DocumentManagement/Program.cs#L331-L380) | [DocumentClient.CreateDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createdocumentasync.aspx)[DocumentClient.ReadDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdocumentasync.aspx)[DocumentClient.ReplaceDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.replacedocumentasync.aspx) |
| [使用条件 ETag 检查替换文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f2b11dec45a195ddeed333560ebba63055f5ed09/samples/code-samples/DocumentManagement/Program.cs#L398-L440) | [DocumentClient.AccessCondition](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.accesscondition.aspx)[Documents.Client.AccessConditionType](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.accessconditiontype.aspx) |
| [仅当文档已更改时读取文档](https://github.com/Azure/azure-documentdb-dotnet/blob/f2b11dec45a195ddeed333560ebba63055f5ed09/samples/code-samples/DocumentManagement/Program.cs#L442-L470) | [DocumentClient.AccessCondition](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.accesscondition.aspx)[Documents.Client.AccessConditionType](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.accessconditiontype.aspx) |

## 索引示例

IndexManagement 项目示例的 [RunIndexDemo](https://github.com/Azure/azure-documentdb-dotnet/blob/ea8c977b9c2f37ddc2894911ec239907ab60e40a/samples/code-samples/IndexManagement/Program.cs#L89-L117) 方法演示如何执行以下任务。

|  |  |
| --- | --- |
| 任务 | API 参考 |
| [从索引中排除文档](https://github.com/Azure/azure-documentdb-dotnet/blob/2e9a48b6a446b47dd6182606c8608d439b88b683/samples/code-samples/IndexManagement/Program.cs#L125-L163) | [IndexingDirective.Exclude](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.indexingdirective.aspx) |
| [使用手动（而非自动）索引](https://github.com/Azure/azure-documentdb-dotnet/blob/2e9a48b6a446b47dd6182606c8608d439b88b683/samples/code-samples/IndexManagement/Program.cs#L171-L209) | [IndexingPolicy.Automatic](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.indexingpolicy.automatic.aspx) |
| [使用延迟（而非一致）索引](https://github.com/Azure/azure-documentdb-dotnet/blob/2e9a48b6a446b47dd6182606c8608d439b88b683/samples/code-samples/IndexManagement/Program.cs#L221-L238) | [IndexingMode.Lazy](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.indexingpolicy.indexingmode.aspx#P:Microsoft.Azure.Documents.IndexingPolicy.IndexingMode) |
| [从索引中排除指定的文档路径](https://github.com/Azure/azure-documentdb-dotnet/blob/2e9a48b6a446b47dd6182606c8608d439b88b683/samples/code-samples/IndexManagement/Program.cs#L248-L297) | [IndexingPolicy.ExcludedPaths](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.indexingpolicy.excludedpaths.aspx) |
| [对哈希索引路径强制执行范围扫描操作](https://github.com/Azure/azure-documentdb-dotnet/blob/2e9a48b6a446b47dd6182606c8608d439b88b683/samples/code-samples/IndexManagement/Program.cs#L305-L340) | [FeedOptions.EnableScanInQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.feedoptions.enablescaninquery.aspx) |
| [对字符串使用范围索引](https://github.com/Azure/azure-documentdb-dotnet/blob/2e9a48b6a446b47dd6182606c8608d439b88b683/samples/code-samples/IndexManagement/Program.cs#L342-L405) | [IndexingPolicy.IncludedPaths](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.indexingpolicy.includedpaths.aspx)[RangeIndex](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.rangeindex.aspx) |
| [执行索引转换](https://github.com/Azure/azure-documentdb-dotnet/blob/2e9a48b6a446b47dd6182606c8608d439b88b683/samples/code-samples/IndexManagement/Program.cs#L407-L464) | [ReplaceDocumentCollectionAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.replacedocumentcollectionasync.aspx) |

有关索引的详细信息，请参阅 [DocumentDB 索引策略](documentdb-indexing-policies.md)。

## 分区示例

分区示例文件 [azure-documentdb-net/samples/code-samples/Partitioning/Program.cs](https://github.com/Azure/azure-documentdb-net/blob/master/samples/code-samples/Partitioning/Program.cs) 演示如何执行以下任务。在某些情况下，会使用附加的帮助程序文件来完成任务。

|  |  |
| --- | --- |
| 任务 | API 参考 |
| [使用 HashPartitionResolver](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L144-L160) | [HashPartitionResolver](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.partitioning.hashpartitionresolver.aspx) |
| [使用 RangePartitionResolver](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L162-L186) | [Range](https://msdn.microsoft.com/library/azure/mt126048.aspx) 以及[RangePartitionResolver](https://msdn.microsoft.com/library/azure/mt126047.aspx) |
| [实现自定义分区解析程序](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L285) | [IPartitionResolver](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.ipartitionresolver.aspx) |
| 使用 [LookupPartitionResolver.cs](https://github.com/Azure/azure-documentdb-dotnet/blob/master/samples/code-samples/Partitioning/Partitioners/LookupPartitionResolver.cs)[实现简单的查找表](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L115-L119) | [RangePartitionResolver](https://msdn.microsoft.com/library/azure/mt126047.aspx) |
| 使用 [ManagedHashPartitionResolver.cs](https://github.com/Azure/azure-documentdb-dotnet/blob/master/samples/code-samples/Partitioning/Partitioners/ManagedHashPartitionResolver.cs) [实现可创建或克隆集合的分区解析程序](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L121-L126) | [IPartitionResolver](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.ipartitionresolver.aspx) |
| 使用 [SpilloverPartitionResolver.cs](https://github.com/Azure/azure-documentdb-dotnet/blob/master/samples/code-samples/Partitioning/Partitioners/SpilloverPartitionResolver.cs)[实现溢出方案](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L128-L134) | [IPartitionResolver](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.ipartitionresolver.aspx) |
| 使用 [RunSerializeDeserializeSample](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L295-L311)[保存和加载解析程序配置](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L136-L137) | [IPartitionResolver](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.ipartitionresolver.aspx) |
| 使用 [RepartitionDataSample](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L313-L345) 和[DocumentClientHashPartitioningManager.cs](https://github.com/Azure/azure-documentdb-dotnet/blob/master/samples/code-samples/Partitioning/Util/DocumentClientHashPartitioningManager.cs)[添加、删除和重新平衡分区之间的数据](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Partitioning/Program.cs#L139-L141) | [HashPartitionResolver](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.partitioning.hashpartitionresolver.aspx) |
| [在重新分区过程中为路由实现分区解析程序](https://github.com/Azure/azure-documentdb-dotnet/blob/master/samples/code-samples/Partitioning/Partitioners/TransitionHashPartitionResolver.cs) | [IPartitionResolver](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.ipartitionresolver.aspx) |

有关分区和分片的详细信息，请参阅[对 DocumentDB 中的数据进行分区和扩展](documentdb-partition-data.md)。

## 地理空间示例

地理空间示例文件 [azure-documentdb-net/samples/code-samples/Geospatial/Program.cs](https://github.com/Azure/azure-documentdb-dotnet/blob/master/samples/code-samples/Geospatial/Program.cs) 演示如何执行以下任务。

任务 | API 参考  
—- | —  
[对新集合启用地理空间索引](https://github.com/Azure/azure-documentdb-dotnet/blob/7b09c085817e850d683bc59bd864c2f6b552d275/samples/code-samples/Geospatial/Program.cs#L45-L63) | [IndexingPolicy](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.indexingpolicy.aspx)[IndexKind.Spatial](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.indexkind.aspx)[DataType.Point](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.datatype.aspx)  
[使用 GeoJSON 点插入文档](https://github.com/Azure/azure-documentdb-dotnet/blob/7b09c085817e850d683bc59bd864c2f6b552d275/samples/code-samples/Geospatial/Program.cs#L116-L126) | [DocumentClient.CreateDocumentAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createdocumentasync.aspx)[DataType.Point](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.datatype.aspx)  
[查找指定距离内的点](https://github.com/Azure/azure-documentdb-dotnet/blob/7b09c085817e850d683bc59bd864c2f6b552d275/samples/code-samples/Geospatial/Program.cs#L152-L194) | [ST\_DISTANCE](documentdb-sql-query.md#built-in-functions) 或[GeometryOperationExtensions.Distance](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.spatial.geometryoperationextensions.distance.aspx#M:Microsoft.Azure.Documents.Spatial.GeometryOperationExtensions.Distance(Microsoft.Azure.Documents.Spatial.Geometry,Microsoft.Azure.Documents.Spatial.Geometry)  
[查找多边形内的点](https://github.com/Azure/azure-documentdb-dotnet/blob/7b09c085817e850d683bc59bd864c2f6b552d275/samples/code-samples/Geospatial/Program.cs#L196-L221) | [ST\_WITHIN](documentdb-sql-query.md#built-in-functions) 或[GeometryOperationExtensions.Within](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.spatial.geometryoperationextensions.within.aspx#M:Microsoft.Azure.Documents.Spatial.GeometryOperationExtensions.Within(Microsoft.Azure.Documents.Spatial.Geometry,Microsoft.Azure.Documents.Spatial.Geometry) and[Polygon](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.spatial.polygon.aspx)  
[对现有集合启用地理空间索引](https://github.com/Azure/azure-documentdb-dotnet/blob/7b09c085817e850d683bc59bd864c2f6b552d275/samples/code-samples/Geospatial/Program.cs#L312-L336) | [DocumentClient.ReplaceDocumentCollectionAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.replacedocumentcollectionasync.aspx)[DocumentCollection.IndexingPolicy](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.documentcollection.indexingpolicy.aspx#P:Microsoft.Azure.Documents.DocumentCollection.IndexingPolicy)  
[验证点和多边形数据](https://github.com/Azure/azure-documentdb-dotnet/blob/7b09c085817e850d683bc59bd864c2f6b552d275/samples/code-samples/Geospatial/Program.cs#L223-L265) | [ST\_ISVALIDST\_ISVALIDDETAILED](documentdb-sql-query.md#built-in-functions)[GeometryOperationExtensions.IsValid](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.spatial.geometryoperationextensions.isvalid.aspx)[GeometryOperationExtensions.IsValidDetailed](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.spatial.geometryoperationextensions.isvaliddetailed.aspx)

有关使用地理空间数据的详细信息，请参阅 [使用 Azure DocumentDB 中的地理空间数据](/documentation/articles/documentdb-geospatial)。

## 查询示例

查询文档文件 [azure-documentdb-net/samples/code-samples/Queries/Program.cs](https://github.com/Azure/azure-documentdb-net/blob/master/samples/code-samples/Queries/Program.cs) 演示如何通过 SQL 查询语法以及使用查询和 Lambda 的 LINQ 提供程序执行以下各项任务。

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| --- | --- |
| 任务 | API 参考 |
| [查询所有文档](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L122-L138) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用 == 查询等式](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L251-L268) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用 != 和 NOT 查询不等式](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L270-L276) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用 >、<、>=、<= 等范围运算符进行查询](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L305-L325) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用范围运算符对字符串进行查询](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L337-L346) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用 Order By 进行查询](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L370-L392) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用子文档](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L394-L419) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用文档内联接进行查询](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L421-L435) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [使用字符串、数学和数组运算符进行查询](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L527-L552) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |
| [通过使用 SqlQuerySpec 的参数化 SQL 进行查询](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L140-L174) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx)[SqlQuerySpec](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.sqlqueryspec.aspx) |
| [使用显式分页进行查询](https://github.com/Azure/azure-documentdb-dotnet/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/Queries/Program.cs#L554-L576) | [DocumentQueryable.CreateDocumentQuery](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.linq.documentqueryable.createdocumentquery.aspx) |

有关编写查询的详细信息，请参阅 [DocumentDB 内的 SQL 查询](/documentation/articles/documentdb-sql-query)。

## 服务器端编程示例

服务器端编程文件 [azure-documentdb-net/samples/code-samples/ServerSideScripts/Program.cs](https://github.com/Azure/azure-documentdb-net/blob/master/samples/code-samples/ServerSideScripts/Program.cs) 演示如何执行以下任务。

|  |  |
| --- | --- |
| 任务 | API 参考 |
| [创建存储过程](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/ServerSideScripts/Program.cs#L112) | [DocumentClient.CreateStoredProcedureAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createstoredprocedureasync.aspx) |
| [执行存储过程](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/ServerSideScripts/Program.cs#L127) | [DocumentClient.ExecuteStoredProcedureAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.executestoredprocedureasync.aspx) |
| [读取存储过程的文档源](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/ServerSideScripts/Program.cs#L194) | [DocumentClient.ReadDocumentFeedAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readdocumentfeedasync.aspx) |
| [使用 Order by 创建存储过程](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/ServerSideScripts/Program.cs#L219) | [DocumentClient.CreateStoredProcedureAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createstoredprocedureasync.aspx) |
| [创建预触发器](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/ServerSideScripts/Program.cs#L264) | [DocumentClient.CreateTriggerAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createtriggerasync.aspx) |
| [创建后触发器](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/ServerSideScripts/Program.cs#L329) | [DocumentClient.CreateTriggerAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createtriggerasync.aspx) |
| [创建用户定义函数 (UDF)](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/ServerSideScripts/Program.cs#L389) | [DocumentClient.CreateUserDefinedFunctionAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createuserdefinedfunctionasync.aspx) |

有关服务器端编程的详细信息，请参阅 [DocumentDB 服务器端编程：存储过程、数据库触发器和 UDF](/documentation/articles/documentdb-programming)。

## 用户管理示例

用户管理文件 [azure-documentdb-net/samples/code-samples/UserManagement/Program.cs](https://github.com/Azure/azure-documentdb-net/blob/master/samples/code-samples/UserManagement/Program.cs) 演示如何执行以下任务。

|  |  |
| --- | --- |
| 任务 | API 参考 |
| [创建用户](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/UserManagement/Program.cs#L81) | [DocumentClient.CreateUserAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createuserasync.aspx) |
| [对集合或文档设置权限](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/UserManagement/Program.cs#L85) | [DocumentClient.CreatePermissionAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.createpermissionasync.aspx) |
| [获取用户权限列表](https://github.com/Azure/azure-documentdb-net/blob/d17c0ca5be739a359d105cf4112443f65ca2cb72/samples/code-samples/UserManagement/Program.cs#L218) | [DocumentClient.ReadUserAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readuserasync.aspx)[DocumentClient.ReadPermissionFeedAsync](https://msdn.microsoft.com/library/azure/microsoft.azure.documents.client.documentclient.readpermissionfeedasync.aspx) |