## Dataedo

# AdventureWorks Data Dictionary

2017-05-30





# Table of Contents

1. Adven	tureWorks	7
2. Busine	ess Entities	8
3. People	<u> </u>	9
3.1. Tab	les	9
3.1.1.	Table: Person.Address	9
3.1.2.	Table: Person.AddressType	10
3.1.3.	Table: Person.BusinessEntity	11
3.1.4.	Table: Person.BusinessEntityAddress	12
3.1.5.	Table: Person.BusinessEntityContact	13
3.1.6.	Table: Person.ContactType	14
3.1.7.	Table: Person.CountryRegion	14
3.1.8.	Table: Person.EmailAddress	15
3.1.9.	Table: Person.Password	16
3.1.10.	Table: Person.Person	16
3.1.11.	Table: Person.PersonPhone	18
3.1.12.	Table: Person.PhoneNumberType	19
3.1.13.	Table: Person.StateProvince	19
3.2. Vie	ws	21
3.2.1.	View: Person.vAdditionalContactInfo	21
3.2.2.	View: Person.vStateProvinceCountryRegion	21
4. Huma	n Resources	23
4.1. Tab	les	23
4.1.1.	Table: HumanResources.Department	23
4.1.2.	Table: HumanResources.Employee	24
4.1.3.	Table: HumanResources.EmployeeDepartmentHistory	26
4.1.4.	Table: HumanResources.EmployeePayHistory	27
4.1.5.	Table: HumanResources JobCandidate	27
4.1.6.	Table: HumanResources.Shift	28
4.2. Vie	WS	29
4.2.1.	View: HumanResources.vEmployee	29
4.2.2.	View: HumanResources.vEmployeeDepartment	29
4.2.3.	View: HumanResources.vEmployeeDepartmentHistory	30
4.2.4.	View: HumanResources.vJobCandidate	30
4.2.5.	View: HumanResources.vJobCandidateEducation	31
4.2.6.	View: HumanResources.vJobCandidateEmployment	31
4.3. Pro	cedures	32
4.3.1.	Procedure: dbo.uspGetEmployeeManagers	32
	Procedure: dbo.uspGetManagerEmployees	
	Procedure: dbo.uspSearchCandidateResumes	
	Procedure: HumanResources.uspUpdateEmployeeHireInfo	
4.3.5.	Procedure: HumanResources.uspUpdateEmployeeLogin	33
	Procedure: HumanResources.uspUpdateEmployeePersonalInfo	
4.4. Fur	nctions	33
4.4.1.	Function: dbo.ufnGetContactInformation	33
5. Produ	cts	34

5.1. Tak	bles	34
5.1.1.	Table: Production.Culture	34
5.1.2.	Table: Production.Document	35
5.1.3.	Table: Production.Illustration	36
5.1.4.	Table: Production.Product	36
5.1.5.	Table: Production.ProductCategory	39
5.1.6.	Table: Production.ProductDescription	40
5.1.7.	Table: Production.ProductDocument	41
5.1.8.	Table: Production.ProductModel	42
5.1.9.	Table: Production.ProductModelIllustration	42
5.1.10.	). Table: Production.ProductModelProductDescriptionCulture	43
5.1.11.	. Table: Production.ProductPhoto	44
5.1.12.	2. Table: Production.ProductProductPhoto	45
5.1.13.	. Table: Production.ProductReview	45
5.1.14.	I. Table: Production.ProductSubcategory	46
5.1.15.	. Table: Production.UnitMeasure	47
5.2. Vi€	ews	48
5.2.1.	View: Production.vProductAndDescription	48
5.2.2.	. View: Production.vProductModelCatalogDescription	48
5.2.3.	. View: Production.vProductModelInstructions	49
5.3. Pro	ocedures	49
5.3.1.	Procedure: dbo.uspGetBillOfMaterials	49
5.3.2.	Procedure: dbo.uspGetWhereUsedProductID	50
5.4. Fu	ınctions	50
5.4.1.	Function: dbo.ufnGetDocumentStatusText	50
5.4.2.	. Function: dbo.ufnGetProductDealerPrice	50
5.4.3.	. Function: dbo.ufnGetProductListPrice	50
5.4.4.	. Function: dbo.ufnGetProductStandardCost	51
5.4.5.	Function: dbo.ufnGetStock	51
6. Manu	ıfacturing	52
6.1. Tak	bles	52
6.1.1.	Table: Production.BillOfMaterials	52
6.1.2.	Table: Production.ProductCostHistory	53
6.1.3.	Table: Production.ProductListPriceHistory	54
6.1.4.	Table: Production.ScrapReason	55
6.1.5.	Table: Production.TransactionHistory	55
6.1.6.	Table: Production.TransactionHistoryArchive	56
6.1.7.	Table: Production.WorkOrder	57
6.1.8.	Table: Production.WorkOrderRouting	58
7. Purch	nasing	60
7.1. Tak	bles	60
7.1.1.	Table: Purchasing.ProductVendor	60
7.1.2.	Table: Purchasing.PurchaseOrderDetail	61
7.1.3.	Table: Purchasing.PurchaseOrderHeader	62
7.1.4.	Table: Purchasing.ShipMethod	64
7.1.5.	Table: Purchasing.Vendor	65

7.2. Vi∈	ews	66
7.2.1.	View: Purchasing.vVendorWithAddresses	66
7.2.2.	View: Purchasing.vVendorWithContacts	66
7.3. Fui	nctions	67
7.3.1.	Function: dbo.ufnGetPurchaseOrderStatusText	67
8. Invent	tory	68
8.1. Tak	bles	68
8.1.1.	Table: Production.Location	68
8.1.2.	Table: Production.ProductInventory	69
9. Sales		71
9.1. Tab	bles	
9.1.1.	Table: Sales.CountryRegionCurrency	71
	Table: Sales.CreditCard	
9.1.3.	Table: Sales.Currency	73
9.1.4.	Table: Sales.CurrencyRate	73
9.1.5.	Table: Sales.Customer	74
9.1.6.	Table: Sales.PersonCreditCard	76
9.1.7.	Table: Sales.SalesOrderDetail	76
9.1.8.	Table: Sales.SalesOrderHeader	77
9.1.9.	Table: Sales.SalesOrderHeaderSalesReason	80
9.1.10.	Table: Sales.SalesPerson	81
9.1.11.	Table: Sales.SalesPersonQuotaHistory	82
9.1.12.	. Table: Sales.SalesReason	83
9.1.13.	. Table: Sales.SalesTaxRate	83
9.1.14.	. Table: Sales.SalesTerritory	84
9.1.15.	. Table: Sales.SalesTerritoryHistory	86
9.1.16.	. Table: Sales.ShoppingCartItem	86
9.1.17.	. Table: Sales.SpecialOffer	87
9.1.18.	. Table: Sales.SpecialOfferProduct	88
9.1.19.	. Table: Sales.Store	89
9.2. Vi∈	ews	90
9.2.1.	View: Sales.vIndividualCustomer	90
9.2.2.	View: Sales.vPersonDemographics	91
9.2.3.	View: Sales.vSalesPerson	91
9.2.4.	View: Sales.vSalesPersonSalesByFiscalYears	92
9.2.5.	View: Sales.vStoreWithAddresses	92
9.2.6.	View: Sales.vStoreWithContacts	93
9.2.7.	View: Sales.vStoreWithDemographics	93
9.3. Fui	nctions	94
9.3.1.	Function: dbo.ufnGetAccountingEndDate	94
9.3.2.	Function: dbo.ufnGetAccountingStartDate	94
9.3.3.	Function: dbo.ufnGetSalesOrderStatusText	94
9.3.4.	Function: dbo.ufnLeadingZeros	94
10. Adm	iin	95
10.1. Ta	ables	95
10.1.1.	Table: dbo.AWBuildVersion	95

10.1.2.	Table: dbo.DatabaseLog	. 95
	Table: dbo.ErrorLog	.95
10.2. Pro	ocedures	96
10.2.1.	Procedure: dbo.uspLogError	.96
10.2.2.	Procedure: dbo.uspPrintError	.96

## Legend

- **?** Primary key
- Primary key disabled
- **%** User-defined primary key
- **?** Unique key
- ¶ Unique key disabled
- 1 User-defined unique key
- Active trigger
- Disabled trigger
- ➤ Primary key relation
- > User-defined primary key relation
- **≺** Foreign key relation
- ◀ User-defined foreign key relation
- Input
- **@→** Output
- Input/Output
- N Nullable

# 1. AdventureWorks

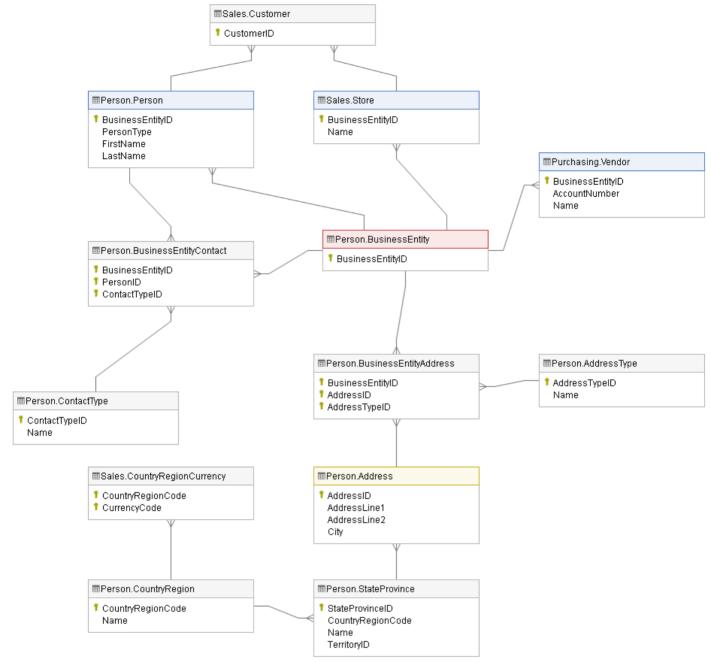
This is a sample Dataedo documentation - **AdventureWorks** - Microsoft SQL Server sample database.

The AdventureWorks database supports standard online transaction processing scenarios for a fictitious bicycle manufacturer (Adventure Works Cycles). Scenarios include Manufacturing, Sales, Purchasing, Product Management, Contact Management, and Human Resources.

You can download AdventureWorks database here:

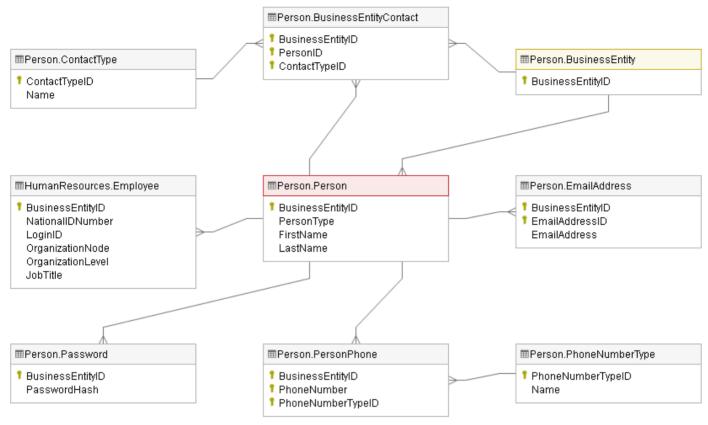
- AdventureWorks for SQL Server 2014 (CodePlex)
- AdventureWorks for SQL Server 2012 (CodePlex)
- AdventureWorks for SQL Server 2008R2 (CodePlex)

# 2. Business Entities



Vendors, customers, and employees have common tables for addresses and contacts. Those tables are linked to one table - BusinessEntity that holds ID for all vendors, customers, and employees tables.

# 3. People



Names and addresses of individual customers, vendors, and employees.

#### 3.1. Tables

#### 3.1.1. Table: Person.Address

Street address information for customers, employees, and vendors.

	Name	Data type	Ν	Description / Attributes
P	AddressID	int		Primary key for Address records. Identity / Auto increment column
	AddressLine1	nvarchar(60)		First street address line.
	AddressLine2	nvarchar(60)	N	Second street address line.
	City	nvarchar(30)		Name of the city.
	StateProvinceID	int		Unique identification number for the state or province. Foreign key to StateProvince table.
	PostalCode	nvarchar(15)		Postal code for the street address.
	SpatialLocation	geography	N	Latitude and longitude of this address.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
>	Person.StateProvince		FK_Address_StateProvince_StateProvinceID Foreign key constraint referencing StateProvince.StateProvinceID.

## Linked from

Table		Join	Title / Name / Description	
~	Person RusinessEntityAddress   Person RusinessEntityAddress Address		FK_BusinessEntityAddress_Address_AddressID Foreign key constraint referencing Address.AddressID.	
~	Sales Sales ( )rderHeader   Sales Sales ( )rderHeader Kill o / ddress		FK_SalesOrderHeader_Address_BillToAddressID Foreign key constraint referencing Address.AddressID.	
<b>~</b>	Sales.SalesOrderHeader	Person.Address,AddressID = Sales.SalesOrderHeader.ShipToAddres sID	FK_SalesOrderHeader_Address_ShipToAddressID Foreign key constraint referencing Address.AddressID.	

# Unique keys

	Columns	Name / Description
Ŷ	AddressID	PK_Address_AddressID Primary key (clustered) constraint
P	rowguid	AK_Address_rowguid Unique nonclustered index. Used to support replication samples.
٩	AddressLine1, AddressLine2, City, StateProvinceID, PostalCode	IX_Address_AddressLine1_AddressLine2_City_StateProvinceID_PostalCode Nonclustered index.

#### Uses

	Name
■ Person.Address	
■ Person.StateProvince	

# Used by

	Name
Person.Address	
■ Sales.SalesOrderHeader	

# 3.1.2. Table: Person.AddressType

Types of addresses stored in the Address table.

	Name	Data type	Ν	Description / Attributes
P	AddressTypeID	int		Primary key for AddressType records. Identity / Auto increment column
	Name	nvarchar(50)		Address type description. For example, Billing, Home, or Shipping.

Name	Data type	Ν	Description / Attributes
rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
-	← Person.BusinessEntityAddress	Person.AddressType.AddressTypeID = Person.BusinessEntityAddress.Address TypeID	FK_BusinessEntityAddress_AddressType_AddressTypeID Foreign key constraint referencing AddressType.AddressTypeID.

# Unique keys

	Columns	Name / Description
Ŷ	AddressTypeID  PK_AddressType_AddressTypeID  Primary key (clustered) constraint	
Name  AK_AddressType_Name Unique nonclustered index.		*!
P	owguid  AK_AddressType_rowguid  Unique nonclustered index. Used to support replication samples.	

# Used by

	Name
⊞ Person.AddressType	
■ Person.BusinessEntityAddress	

# 3.1.3. Table: Person.BusinessEntity

Source of the ID that connects vendors, customers, and employees with address and contact information.

#### Columns

	Name	Data type	Ν	Description / Attributes
(	BusinessEntityID	int		Primary key for all customers, vendors, and employees. Identity / Auto increment column
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description
Person Businessentity and ress		= Person.BusinessEntityAddress.Business	FK_BusinessEntityAddress_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID.
<b>+</b>	Person.BusinessEntityContact	Person.BusinessEntity.BusinessEntityID = Person.BusinessEntityContact.Business EntityID	FK_BusinessEntityContact_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID.

	Table	Join	Title / Name / Description
+	Person.Person	Person.BusinessEntity.BusinessEntityID = Person.Person.BusinessEntityID	FK_Person_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID.
+	Sales.Store	Person.BusinessEntity.BusinessEntityID = Sales.Store.BusinessEntityID	FK_Store_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID
+	Purchasing. Vendor	Person.BusinessEntity.BusinessEntityID = Purchasing.Vendor.BusinessEntityID	FK_Vendor_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID

Columns	Name / Description
PK_BusinessEntityID  PK_BusinessEntityID  Primary key (clustered) constraint	
	AK_BusinessEntity_rowguid Unique nonclustered index. Used to support replication samples.

# Used by

1	Name
m Person.BusinessEntity	
⊞ Person.Person	
Ⅲ Purchasing. Vendor	
■ Sales.Store	

# 3.1.4. Table: Person.BusinessEntityAddress

Cross-reference table mapping customers, vendors, and employees to their addresses.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Primary key. Foreign key to BusinessEntity.BusinessEntityID.
Ŷ	AddressID	int		Primary key. Foreign key to Address.AddressID.
Ŷ	AddressTypeID	int		Primary key. Foreign key to AddressType.AddressTypeID.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.Address	Person.BusinessEntityAddress.AddressID = Person.Address.AddressID	FK_BusinessEntityAddress_Address_AddressID Foreign key constraint referencing Address.AddressID.
<b>&gt;</b>	Percon ((ddress Lyne Lyne)) =		FK_BusinessEntityAddress_AddressType_AddressTypeID Foreign key constraint referencing AddressType.AddressTypeID.
<b>&gt;</b>	Person.BusinessEntity	Person.BusinessEntityAddress.Business EntityID = Person.BusinessEntity.BusinessEntityID	FK_BusinessEntityAddress_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID.

		Columns	Name / Description
BusinessEntityID, AddressID, AddressTypeID PK_BusinessEntityAddress_BusinessEntityID_AddressID_AddressTypeID Primary key (clustered) constraint		BusinessEntityID, AddressID, AddressTypeID	
	rowguid  AK_BusinessEntityAddress_rowguid Unique nonclustered index. Used to support replication samples.		

#### Uses

	Name
■ Person.BusinessEntityAddress	
⊞ Person.Address	
⊞ Person.AddressType	

# 3.1.5. Table: Person.BusinessEntityContact

# Cross-reference table mapping stores, vendors, and employees to people

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Primary key. Foreign key to BusinessEntity.BusinessEntityID.
Ŷ	PersonID	int		Primary key. Foreign key to Person.BusinessEntityID.
Ŷ	ContactTypeID	int		Primary key. Foreign key to ContactType.ContactTypeID.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.BusinessEntity	Person.BusinessEntityContact.Business EntityID = Person.BusinessEntity.BusinessEntityID	FK_BusinessEntityContact_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID.
<b>&gt;</b>	Person.ContactType	Person.BusinessEntityContact.ContactT ypeID = Person.ContactType.ContactTypeID	FK_BusinessEntityContact_ContactType_ContactTypeID Foreign key constraint referencing ContactType.ContactTypeID.
<b>&gt;</b>	Person.Person	Person.BusinessEntityContact.PersonID = Person.Person.BusinessEntityID	FK_BusinessEntityContact_Person_PersonID Foreign key constraint referencing Person.BusinessEntityID.

# Unique keys

		Columns	Name / Description	
BusinessEntityID, PersonID, ContactTypeID  PK_BusinessEntityContact_BusinessEntityID_PersonID_ContactTypeID  Primary key (clustered) constraint		-		
	9	rowguid	AK_BusinessEntityContact_rowguid Unique nonclustered index. Used to support replication samples.	

#### Uses

Name
Person.BusinessEntityContact
⊞ Person.BusinessEntity
☐ Person.ContactType
⊞ Person.Person

# 3.1.6. Table: Person.ContactType

Lookup table containing the types of business entity contacts.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ContactTypeID	int		Primary key for ContactType records. Identity / Auto increment column
	Name	nvarchar(50)		Contact type description.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

Table	Join	Title / Name / Description
→ Person.BusinessEntityContact	Person.ContactType.ContactTypeID = Person.BusinessEntityContact.ContactTypeID	FK_BusinessEntityContact_ContactType_ContactTypeID Foreign key constraint referencing ContactType.ContactTypeID.

# Unique keys

	Columns	Name / Description
Ŷ	ContactTypeID	PK_ContactType_ContactTypeID Primary key (clustered) constraint
9	Name	AK_ContactType_Name Unique nonclustered index.

# Used by

	Name
■ Person.ContactType	
■ Person.BusinessEntityContact	

# 3.1.7. Table: Person.CountryRegion

Lookup table containing the ISO standard codes for countries and regions.

	Name	Data type	Ν	Description / Attributes
?	CountryRegionCode	nvarchar(3)		ISO standard code for countries and regions.
	Name	nvarchar(50)		Country or region name.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description
<b>+</b>	Sales.CountryRegionCurrency	Person.CountryRegion.CountryRegion Code = Sales.CountryRegionCurrency.Country RegionCode	FK_CountryRegionCurrency_CountryRegion_CountryRegionCode Foreign key constraint referencing CountryRegion.CountryRegionCode.
4	Sales.SalesTerritory	Person.CountryRegion.CountryRegion Code = Sales.SalesTerritory.CountryRegionCo de	FK_SalesTerritory_CountryRegion_CountryRegionCode Foreign key constraint referencing CountryRegion.CountryRegionCode.
<b>+</b>	Person.StateProvince	Person.CountryRegion.CountryRegion Code = Person.StateProvince.CountryRegionCode	FK_StateProvince_CountryRegion_CountryRegionCode Foreign key constraint referencing CountryRegion.CountryRegionCode.

# Unique keys

Columns		Name / Description
Ŷ	CountryRegionCode	PK_CountryRegion_CountryRegionCode Primary key (clustered) constraint
P	Name	AK_CountryRegion_Name Unique nonclustered index.

# Used by

N	lame
m Person.CountryRegion	
■ Person.StateProvince	
■ Sales.CountryRegionCurrency	

# 3.1.8. Table: Person.EmailAddress

# Where to send a person email.

## Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Primary key. Person associated with this email address. Foreign key to Person.BusinessEntityID
P	EmailAddressID	int		Primary key. ID of this email address. Identity / Auto increment column
	EmailAddress	nvarchar(50)	N	E-mail address for the person.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
>	Person.Person	Person.EmailAddress.BusinessEntityID = Person.Person.BusinessEntityID	FK_EmailAddress_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.

	Columns	Name / Description
Ŷ	BusinessEntityID, EmailAddressID	PK_EmailAddress_BusinessEntityID_EmailAddressID Primary key (clustered) constraint

#### Uses

	Name
■ Person.EmailAddress	
⊞ Person.Person	

#### 3.1.9. Table: Person.Password

## One way hashed authentication information

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		
	PasswordHash	varchar(128)		Password for the e-mail account.
	PasswordSalt	varchar(10)		Random value concatenated with the password string before the password is hashed.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.Person	Person.Password.BusinessEntityID = Person.Person.BusinessEntityID	FK_Password_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.

## Unique keys

	Columns	Name / Description
Ŷ	BusinessEntityID	PK_Password_BusinessEntityID Primary key (clustered) constraint

#### Uses

	Name	
Person.Password		
Person.Person		

#### 3.1.10. Table: Person.Person

Human beings involved with AdventureWorks: employees, customer contacts, and vendor contacts.

	Name	Data type	Ν	Description / Attributes
9	BusinessEntityID	int		Primary key for Person records.

Name	Data type	Ν	Description / Attributes
PersonType	nchar(2)		Primary type of person: SC = Store Contact, IN = Individual (retail) customer, SP = Sales person, EM = Employee (non-sales), VC = Vendor contact, GC = General contact
NameStyle	bit		0 = The data in FirstName and LastName are stored in western style (first name, last name) order. 1 = Eastern style (last name, first name) order. Default: 0
Title	nvarchar(8)	N	A courtesy title. For example, Mr. or Ms.
FirstName	nvarchar(50)		First name of the person.
MiddleName	nvarchar(50)	N	Middle name or middle initial of the person.
LastName	nvarchar(50)		Last name of the person.
Suffix	nvarchar(10)	N	Surname suffix. For example, Sr. or Jr.
EmailPromotion	int		0 = Contact does not wish to receive e-mail promotions, 1 = Contact does wish to receive e-mail promotions from AdventureWorks, 2 = Contact does wish to receive e-mail promotions from AdventureWorks and selected partners.  Default: 0
AdditionalContactInfo	xml	N	Additional contact information about the person stored in xml format.
Demographics	xml	N	Personal information such as hobbies, and income collected from online shoppers. Used for sales analysis.
rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.BusinessEntity	Person.Person.BusinessEntityID = Person.BusinessEntity.BusinessEntityID	FK_Person_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID.

# Linked from

	Table	Join	Title / Name / Description
~	Person.BusinessEntityContact	Person.Person.BusinessEntityID = Person.BusinessEntityContact.PersonID	FK_BusinessEntityContact_Person_PersonID Foreign key constraint referencing Person.BusinessEntityID.
~	Sales.Customer	Person.Person.BusinessEntityID = Sales.Customer.PersonID	FK_Customer_Person_PersonID Foreign key constraint referencing Person.BusinessEntityID.
~	Person.EmailAddress	Person.Person.BusinessEntityID = Person.EmailAddress.BusinessEntityID	FK_EmailAddress_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.
+	HumanResources.Employee	Person.Person.BusinessEntityID = HumanResources.Employee.BusinessE ntityID	FK_Employee_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.
~	Person. Password	Person.Person.BusinessEntityID = Person.Password.BusinessEntityID	FK_Password_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.
<b>+</b>	Sales.PersonCreditCard	Person.Person.BusinessEntityID = Sales.PersonCreditCard.BusinessEntityID	FK_PersonCreditCard_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.
<b>~</b>	Person.PersonPhone	Person.Person.BusinessEntityID = Person.PersonPhone.BusinessEntityID	FK_PersonPhone_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.

		Columns	Name / Description
PK_Person_BusinessEntityID Primary key (clustered) constraint			
	rowguid  AK_Person_rowguid Unique nonclustered index. Used to support replication samples.		

# Triggers

	Name	When	Description
<b>≯</b> iuF	iPerson	•	AFTER INSERT, UPDATE trigger inserting Individual only if the Customer does not exist in the Store table and setting the ModifiedDate column in the Person table to the current date.

#### Uses

	Name
■ Person.Person	
■ Person.BusinessEntity	

# Used by

	Name
HumanResources.Employee	
⊞ Person.PersonPhone	

# 3.1.11. Table: Person.PersonPhone

# Telephone number and type of a person.

## Columns

	Name	Data type	Ν	Description / Attributes
P	BusinessEntityID	int		Business entity identification number. Foreign key to Person.BusinessEntityID.
Ŷ	PhoneNumber	nvarchar(25)		Telephone number identification number.
Ŷ	PhoneNumberTypeID	int		Kind of phone number. Foreign key to PhoneNumberType.PhoneNumberTypeID.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.Person	Person.PersonPhone.BusinessEntityID = Person.Person.BusinessEntityID	FK_PersonPhone_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.PhoneNumberType	Person.PersonPhone.PhoneNumberTy peID = Person.PhoneNumberType.PhoneNu mberTypeID	FK_PersonPhone_PhoneNumberType_PhoneNumberTypeID Foreign key constraint referencing PhoneNumberType.PhoneNumberTypeID.

	Columns	Name / Description
P	BusinessEntityID, PhoneNumber, PhoneNumberTypeID	PK_PersonPhone_BusinessEntityID_PhoneNumber_PhoneNumberTypeID Primary key (clustered) constraint

#### Uses

Nam	ne
■ Person.PersonPhone	
☐ Person.Person ☐	
⊞ Person.PhoneNumberType	

# 3.1.12. Table: Person.PhoneNumberType

Type of phone number of a person.

#### Columns

Name		Data type	Ν	Description / Attributes
9	PhoneNumberTypeID	int		Primary key for telephone number type records. Identity / Auto increment column
	Name	nvarchar(50)		Name of the telephone number type
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description	
<del>\</del>	Person.PersonPhone	Person.PhoneNumberType.PhoneNumberTypeID = Person.PersonPhone.PhoneNumberTypeID	FK_PersonPhone_PhoneNumberType_PhoneNumberTypeID Foreign key constraint referencing PhoneNumberType.PhoneNumberTypeID.	

# Unique keys

	Columns	Name / Description
P	PhoneNumberTypeID	PK_PhoneNumberType_PhoneNumberTypeID Primary key (clustered) constraint

#### Used by

	Name	
Person.PhoneNumberType		
⊞ Person.PersonPhone		

#### 3.1.13. Table: Person.StateProvince

State and province lookup table.

## Columns

	Name	Data type	Ν	Description / Attributes
P	StateProvinceID	int		Primary key for StateProvince records. Identity / Auto increment column
	StateProvinceCode	nchar(3)		ISO standard state or province code.
	CountryRegionCode	nvarchar(3)		ISO standard country or region code. Foreign key to CountryRegion.CountryRegionCode.
	IsOnlyStateProvinceFlag	bit		0 = StateProvinceCode exists. 1 = StateProvinceCode unavailable, using CountryRegionCode. Default: 1
	Name	nvarchar(50)		State or province description.
	TerritoryID	int		ID of the territory in which the state or province is located. Foreign key to SalesTerritory.SalesTerritoryID.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

# Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.CountryRegion	Person.StateProvince.CountryRegionC ode = Person.CountryRegion.CountryRegion Code	FK_StateProvince_CountryRegion_CountryRegionCode Foreign key constraint referencing CountryRegion.CountryRegionCode.
<b>&gt;</b>	Sales.SalesTerritory	Person.StateProvince.TerritoryID = Sales.SalesTerritory.TerritoryID	FK_StateProvince_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.

#### Linked from

	Table	Join	Title / Name / Description
<b>+</b>	Person.Address	Person.StateProvince.StateProvinceID = Person.Address.StateProvinceID	FK_Address_StateProvince_StateProvinceID Foreign key constraint referencing StateProvince.StateProvinceID.
+	Sales.SalesTaxRate	Person.StateProvince.StateProvinceID = Sales.SalesTaxRate.StateProvinceID	FK_SalesTaxRate_StateProvince_StateProvinceID Foreign key constraint referencing StateProvince.StateProvinceID.

## Unique keys

	Columns		Name / Description
StateProvinceID  PK_StateProvince_StateProvinceID  Primary key (clustered) constraint		StateProvinceID	_
	9	Name	AK_StateProvince_Name Unique nonclustered index.
		rowguid	AK_StateProvince_rowguid Unique nonclustered index. Used to support replication samples.
		· ·	AK_StateProvince_StateProvinceCode_CountryRegionCode Unique nonclustered index.

Generated with 🗐 Datædo

#### Uses

Name			
Person.StateProvince			
⊞ Person.CountryRegion			
■ Sales.SalesTerritory			

# Used by

Na	me
m Person.StateProvince	
⊞ Person.Address	
■ Sales.SalesTaxRate	

# 3.2. Views

#### 3.2.1. View: Person.vAdditionalContactInfo

Displays the contact name and content from each element in the xml column AdditionalContactInfo for that person.

#### Columns

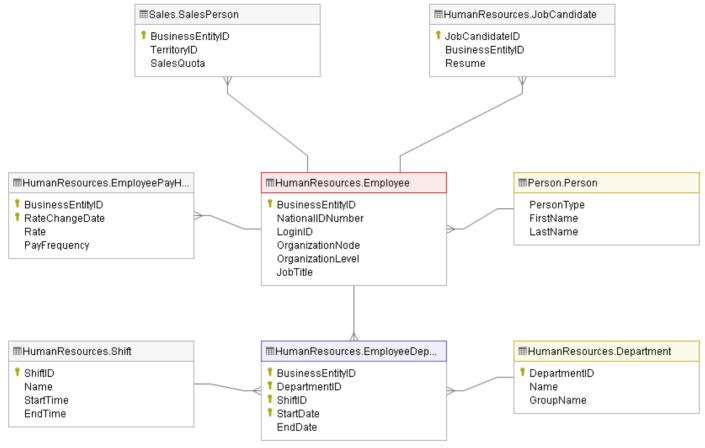
Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
TelephoneNumber	nvarchar(50)	N	
TelephoneSpecialInstructions	nvarchar(MAX)	N	
Street	nvarchar(50)	N	
City	nvarchar(50)	N	
StateProvince	nvarchar(50)	N	
PostalCode	nvarchar(50)	N	
CountryRegion	nvarchar(50)	N	
HomeAddressSpecialInstructions	nvarchar(MAX)	N	
EMailAddress	nvarchar(128)	N	
EMailSpecialInstructions	nvarchar(MAX)	N	
EMailTelephoneNumber	nvarchar(50)	N	
rowguid	uniqueidentifier		
ModifiedDate	datetime		

## 3.2.2. View: Person.vStateProvinceCountryRegion

Joins StateProvince table with CountryRegion table.

Name	Data type	N	Description / Attributes
StateProvinceID	int		
StateProvinceCode	nchar(3)		
IsOnlyStateProvinceFlag	bit		
StateProvinceName	nvarchar(50)		
TerritoryID	int		
CountryRegionCode	nvarchar(3)		
CountryRegionName	nvarchar(50)		

## 4. Human Resources



**Employees of Adventure Works Cycles** 

#### 4.1. Tables

#### 4.1.1. Table: HumanResources.Department

Lookup table containing the departments within the Adventure Works Cycles company.

#### Columns

	Name	Data type	Ν	Description / Attributes
9	DepartmentID	smallint		Primary key for Department records. Identity / Auto increment column
	Name	nvarchar(50)		Name of the department.
	GroupName	nvarchar(50)		Name of the group to which the department belongs.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Human Resources. Employee Depart ment History	HumanResources.Department.Depart mentID = HumanResources.EmployeeDepartme ntHistory.DepartmentID	FK_EmployeeDepartmentHistory_Department_DepartmentID Foreign key constraint referencing Department.DepartmentID.

Columns		Name / Description	
Ŷ	DepartmentID	PK_Department_DepartmentID Primary key (clustered) constraint	
Ŷ	Name	ME AK_Department_Name Unique nonclustered index.	

# Used by

	Name
HumanResources.Department	
HumanResources.EmployeeDepartmentHistory	

# 4.1.2. Table: HumanResources.Employee

Employee information such as salary, department, and title.

	Name	Data type	Ν	Description / Attributes
P	BusinessEntityID	int		Primary key for Employee records. Foreign key to BusinessEntity.BusinessEntityID.
	NationalIDNumber	nvarchar(15)		Unique national identification number such as a social security number.
	LoginID	nvarchar(256)		Network login. Test2
	OrganizationNode	hierarchyid	N	Where the employee is located in corporate hierarchy.
	OrganizationLevel	smallint	N	The depth of the employee in the corporate hierarchy. Computed: [OrganizationNode].[GetLevel]()
	JobTitle	nvarchar(50)		Work title such as Buyer or Sales Representative.
	BirthDate	date		Date of birth.
	MaritalStatus	nchar(1)		M = Married, S = Single
	Gender	nchar(1)		M = Male, F = Female
	HireDate	date		Employee hired on this date.
	SalariedFlag	bit		Job classification. 0 = Hourly, not exempt from collective bargaining. 1 = Salaried, exempt from collective bargaining.  Default: 1
	VacationHours	smallint		Number of available vacation hours. Default: 0
	SickLeaveHours	smallint		Number of available sick leave hours. Default: 0
	CurrentFlag	bit		0 = Inactive, 1 = Active Default: 1
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.Person	HumanResources.Employee.BusinessE ntityID = Person.Person.BusinessEntityID	FK_Employee_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.

## Linked from

	Table	Join	Title / Name / Description
<b>~</b>	HumanResources.EmployeeDepart mentHistory	HumanResources.Employee.BusinessE ntityID = HumanResources.EmployeeDepartme ntHistory.BusinessEntityID	FK_EmployeeDepartmentHistory_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.
<b>~</b>	HumanResources.EmployeePayHist ory	HumanResources.Employee.BusinessE ntityID = HumanResources.EmployeePayHistory .BusinessEntityID	FK_EmployeePayHistory_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.
+	HumanResources.JobCandidate	HumanResources.Employee.BusinessE ntityID = HumanResources.JobCandidate.Busin essEntityID	FK_JobCandidate_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.
+	Purchasing.PurchaseOrderHeader	HumanResources.Employee.BusinessE ntityID = Purchasing.PurchaseOrderHeader.Em ployeeID	FK_PurchaseOrderHeader_Employee_EmployeeID Foreign key constraint referencing Employee.EmployeeID.
+	Sales.SalesPerson	HumanResources.Employee.BusinessEntityID = Sales.SalesPerson.BusinessEntityID	FK_SalesPerson_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.

# Unique keys

	Columns	Name / Description
P	BusinessEntityID	PK_Employee_BusinessEntityID Primary key (clustered) constraint
P	LoginID	AK_Employee_LoginID Unique nonclustered index.
P	NationallDNumber	AK_Employee_NationallDNumber Unique nonclustered index.
Ŷ	rowguid	AK_Employee_rowguid Unique nonclustered index. Used to support replication samples.

# Triggers

Name	When	Description
<b>d</b> Employee	Instead Of Delete	INSTEAD OF DELETE trigger which keeps Employees from being deleted.

## Uses

	Name
HumanResources.Employee	
⊞ Person.Person	

Generated with 📳 Datædo

# Used by

Name
HumanResources.Employee
HumanResources.EmployeeDepartmentHistory
HumanResources.EmployeePayHistory
HumanResources.JobCandidate
☐ Purchasing.PurchaseOrderHeader ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
■ Sales.SalesPerson

# 4.1.3. Table: HumanResources.EmployeeDepartmentHistory

# Employee department transfers.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Employee identification number. Foreign key to Employee.BusinessEntityID.
P	DepartmentID	smallint		Department in which the employee worked including currently. Foreign key to Department.DepartmentID.
Ŷ	ShiftID	tinyint		Identifies which 8-hour shift the employee works. Foreign key to Shift.Shift.ID.
Ŷ	StartDate	date		Date the employee started work in the department.
	EndDate	date	N	Date the employee left the department. NULL = Current department.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Human Resources, Department	HumanResources.EmployeeDepartme ntHistory.DepartmentID = HumanResources.Department.Depart mentID	FK_EmployeeDepartmentHistory_Department_DepartmentID Foreign key constraint referencing Department.DepartmentID.
<b>&gt;</b>	HumanResources.Employee	HumanResources.EmployeeDepartme ntHistory.BusinessEntityID = HumanResources.Employee.BusinessE ntityID	FK_EmployeeDepartmentHistory_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.
<b>&gt;</b>	HumanResources,Shift	HumanResources.EmployeeDepartme ntHistory.ShiftID = HumanResources.Shift.ShiftID	FK_EmployeeDepartmentHistory_Shift_ShiftID Foreign key constraint referencing Shift.ShiftID

# Unique keys

	Columns	Name / Description
P	BusinessEntityID, StartDate, DepartmentID, ShiftID	PK_EmployeeDepartmentHistory_BusinessEntityID_StartDate_DepartmentID Primary key (clustered) constraint

#### Uses

Name
HumanResources.EmployeeDepartmentHistory
HumanResources.Department
HumanResources.Employee
⊞ HumanResources.Shift

# 4.1.4. Table: HumanResources.EmployeePayHistory

# Employee pay history.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Employee identification number. Foreign key to Employee.BusinessEntityID.
Ŷ	RateChangeDate	datetime		Date the change in pay is effective
	Rate	money		Salary hourly rate.
	PayFrequency	tinyint		1 = Salary received monthly, 2 = Salary received biweekly
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	HumanResources.Employee	HumanResources.EmployeePayHistory .BusinessEntityID = HumanResources.Employee.BusinessE ntityID	FK_EmployeePayHistory_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.

# Unique keys

	Columns	Name / Description
Ŷ		PK_EmployeePayHistory_BusinessEntityID_RateChangeDate Primary key (clustered) constraint

#### Uses

	Name
HumanResources.EmployeePayHistory	
HumanResources.Employee	

## 4.1.5. Table: HumanResources.JobCandidate

# Résumés submitted to Human Resources by job applicants.

	Name	Data type	Ν	Description / Attributes
(	<b>?</b> JobCandidateID	int		Primary key for JobCandidate records. Identity / Auto increment column
	BusinessEntityID	int	N	Employee identification number if applicant was hired. Foreign key to Employee.BusinessEntityID.
	Resume	xml	N	Résumé in XML format.

Name	Data type	Ν	Description / Attributes
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
>	- HumanResources.Employee	HumanResources.JobCandidate.Busin essEntityID = HumanResources.Employee.BusinessEntityID	FK_JobCandidate_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.

# Unique keys

	Columns	Name / Description
1	lob( andidatell )	PK_JobCandidate_JobCandidateID Primary key (clustered) constraint

#### Uses

	Name
HumanResources.JobCandidate	
HumanResources.Employee	

# 4.1.6. Table: HumanResources.Shift

## Work shift lookup table.

## Columns

	Name	Data type	Ν	Description / Attributes
P	ShiftID	tinyint		Primary key for Shift records. Identity / Auto increment column
	Name	nvarchar(50)		Shift description.
	StartTime	time(7)		Shift start time.
	EndTime	time(7)		Shift end time.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
<b>←</b>	HumanResources.EmployeeDepart mentHistory	<b>HumanResources.Shift.</b> ShiftID = HumanResources.EmployeeDepartme ntHistory.ShiftID	FK_EmployeeDepartmentHistory_Shift_ShiftID Foreign key constraint referencing Shift.ShiftID

# Unique keys

	Columns	Name / Description
Ŷ	ShiftID	PK_Shift_ShiftID Primary key (clustered) constraint
P	Name	AK_Shift_Name Unique nonclustered index.
9	StartTime, EndTime	AK_Shift_StartTime_EndTime Unique nonclustered index.

#### Used by

	Name
HumanResources.Shift	
⊞ HumanResources.EmployeeDepartmentHistory	

# 4.2. Views

# 4.2.1. View: HumanResources.vEmployee

Employee names and addresses.

#### Columns

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Title	nvarchar(8)	N	
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
Suffix	nvarchar(10)	N	
JobTitle	nvarchar(50)		
PhoneNumber	nvarchar(25)	N	
PhoneNumberType	nvarchar(50)	N	
EmailAddress	nvarchar(50)	N	
EmailPromotion	int		
AddressLine1	nvarchar(60)		
AddressLine2	nvarchar(60)	N	
City	nvarchar(30)		
StateProvinceName	nvarchar(50)		
PostalCode	nvarchar(15)		
CountryRegionName	nvarchar(50)		
AdditionalContactInfo	xml	N	

# 4.2.2. View: HumanResources.vEmployeeDepartment

Returns employee name, title, and current department.

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Title	nvarchar(8)	N	
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
Suffix	nvarchar(10)	N	

Name	Data type	Ν	Description / Attributes
JobTitle	nvarchar(50)		
Department	nvarchar(50)		
GroupName	nvarchar(50)		
StartDate	date		

# 4.2.3. View: HumanResources.vEmployeeDepartmentHistory

Returns employee name and current and previous departments.

#### Columns

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Title	nvarchar(8)	N	
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
Suffix	nvarchar(10)	N	
Shift	nvarchar(50)		
Department	nvarchar(50)		
GroupName	nvarchar(50)		
StartDate	date		
EndDate	date	N	

# 4.2.4. View: HumanResources.vJobCandidate

Job candidate names and resumes.

Name	Data type	Ν	Description / Attributes
JobCandidateID	int		Identity / Auto increment column
BusinessEntityID	int	N	
Name.Prefix	nvarchar(30)	N	
Name.First	nvarchar(30)	N	
Name.Middle	nvarchar(30)	N	
Name.Last	nvarchar(30)	N	
Name.Suffix	nvarchar(30)	N	
Skills	nvarchar(MAX)	N	
Addr.Type	nvarchar(30)	N	
Addr.Loc.CountryRegion	nvarchar(100)	N	
Addr.Loc.State	nvarchar(100)	N	
Addr.Loc.City	nvarchar(100)	N	
Addr.PostalCode	nvarchar(20)	N	

Name	Data type	Ν	Description / Attributes
EMail	nvarchar(MAX)	N	
WebSite	nvarchar(MAX)	N	
ModifiedDate	datetime		

#### 4.2.5. View: HumanResources.vJobCandidateEducation

Displays the content from each education related element in the xml column Resume in the HumanResources.JobCandidate table. The content has been localized into French, Simplified Chinese and Thai. Some data may not display correctly unless supplemental language support is installed.

#### Columns

Name	Data type	Ν	Description / Attributes
JobCandidateID	int		Identity / Auto increment column
Edu.Level	nvarchar(MAX)	N	
Edu.StartDate	datetime	N	
Edu.EndDate	datetime	N	
Edu.Degree	nvarchar(50)	N	
Edu.Major	nvarchar(50)	N	
Edu.Minor	nvarchar(50)	N	
Edu.GPA	nvarchar(5)	N	
Edu.GPAScale	nvarchar(5)	N	
Edu.School	nvarchar(100)	N	
Edu.Loc.CountryRegion	nvarchar(100)	N	
Edu.Loc.State	nvarchar(100)	N	
Edu.Loc.City	nvarchar(100)	N	

#### 4.2.6. View: HumanResources.vJobCandidateEmployment

Displays the content from each employement history related element in the xml column Resume in the HumanResources.JobCandidate table. The content has been localized into French, Simplified Chinese and Thai. Some data may not display correctly unless supplemental language support is installed.

Name	Data type	Ν	Description / Attributes
JobCandidateID	int		Identity / Auto increment column
Emp.StartDate	datetime	N	
Emp.EndDate	datetime	N	
Emp.OrgName	nvarchar(100)	N	
Emp.JobTitle	nvarchar(100)	N	
Emp.Responsibility	nvarchar(MAX)	N	
Emp.FunctionCategory	nvarchar(MAX)	N	
Emp.IndustryCategory	nvarchar(MAX)	N	
Emp.Loc.CountryRegion	nvarchar(MAX)	N	
Emp.Loc.State	nvarchar(MAX)	N	

Name	Data type	Ν	Description / Attributes
Emp.Loc.City	nvarchar(MAX)	N	

#### 4.3. Procedures

## 4.3.1. Procedure: dbo.uspGetEmployeeManagers

Stored procedure using a recursive query to return the direct and indirect managers of the specified employee.

#### Input/Output

	Name	Data type	Description
•@	BusinessEntityID	int	Input parameter for the stored procedure uspGetEmployeeManagers. Enter a valid BusinessEntityID from the HumanResources.Employee table.

## 4.3.2. Procedure: dbo.uspGetManagerEmployees

Stored procedure using a recursive query to return the direct and indirect employees of the specified manager.

#### Input/Output

	Name	Data type	Description
<b>→</b> @	BusinessEntityID	int	Input parameter for the stored procedure uspGetManagerEmployees. Enter a valid BusinessEntityID of the manager from the HumanResources.Employee table.

#### 4.3.3. Procedure: dbo.uspSearchCandidateResumes

## Input/Output

	Name	Data type	Description
<b>→</b> @	searchString	nvarchar(1000)	
<b>→</b> @	useInflectional	bit	
<b>→</b> @	useThesaurus	bit	
<b>→</b> @	language	int	

## 4.3.4. Procedure: HumanResources.uspUpdateEmployeeHireInfo

#### Input/Output

	Name Data type		Description	
<b>→</b> @	BusinessEntityID	int	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a valid BusinessEntityID from the Employee table.	
<b>→</b> @	JobTitle	nvarchar(50)	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a title for the employee.	
<b>→</b> @	HireDate	datetime	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a hire date for the employee.	
<b>→</b> @	RateChangeDate	datetime	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter the date the rate changed for the employee.	
<b>→</b> @	Rate	money	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter the new rate for the employee.	
→@	PayFrequency	tinyint	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter the pay frequency for the employee.	

	Name	Data type	Description
÷@	CurrentFlag	DIT	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter the current flag for the employee.

# 4.3.5. Procedure: HumanResources.uspUpdateEmployeeLogin

# Input/Output

	Name Data type		Description	
<b>→</b> @	BusinessEntityID	int	Input parameter for the stored procedure uspUpdateEmployeeLogin. Enter a valid EmployeeID from the Employee table.	
<b>→</b> @	OrganizationNode	hierarchyid	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a valid ManagerID for the employee.	
<b>→</b> @	LoginID	nvarchar(256)	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a valid login for the employee.	
<b>→</b> @	JobTitle	nvarchar(50)	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a title for the employee.	
→@	HireDate	datetime	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a hire date for the employee.	
→@	CurrentFlag	bit	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter the current flag for the employee.	

# 4.3.6. Procedure: HumanResources.uspUpdateEmployeePersonalInfo

## Input/Output

	Name	Data type	Description
<b>→</b> @	BusinessEntityID	int	Input parameter for the stored procedure uspUpdateEmployeePersonalInfo. Enter a valid BusinessEntityID from the HumanResources.Employee table.
<b>→</b> @	NationallDNumber	nvarchar(15)	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a national ID for the employee.
<b>→</b> @	BirthDate	datetime	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a birth date for the employee.
<b>→</b> @	MaritalStatus	nchar(1)	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a marital status for the employee.
→@	Gender	nchar(1)	Input parameter for the stored procedure uspUpdateEmployeeHireInfo. Enter a gender for the employee.

## 4.4. Functions

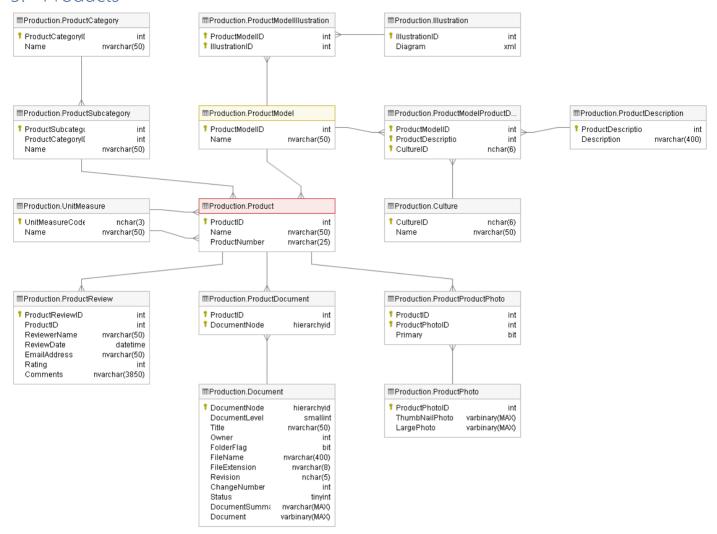
#### 4.4.1. Function: dbo.ufnGetContactInformation

Table value function returning the first name, last name, job title and contact type for a given contact.

## Input/Output

	Name	Data type	Description
<b>-</b> @•	Returns	table type	
<b>→</b> @	PersonID	int	Input parameter for the table value function ufnGetContactInformation. Enter a valid PersonID from the Person.Contact table.

#### 5. Products



Products manufactured and sold by Adventure Works Cycles.

#### 5.1. Tables

#### 5.1.1. Table: Production.Culture

Lookup table containing the languages in which some AdventureWorks data is stored.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	CultureID	nchar(6)		Primary key for Culture records.
	Name	nvarchar(50)		Culture description.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description
<b>←</b>	Production.ProductModelProductD escriptionCulture	Production.Culture.CultureID = Production.ProductModelProductDesc riptionCulture.CultureID	FK_ProductModelProductDescriptionCulture_Culture_CultureID Foreign key constraint referencing Culture.CultureID.

	Columns	Name / Description
Ŷ	CultureID	PK_Culture_CultureID Primary key (clustered) constraint
Ŷ	Name	AK_Culture_Name Unique nonclustered index.

# Used by

	Name
m Production.Culture	
■ Production.ProductModelProductDescriptionCulture	

# 5.1.2. Table: Production.Document

## Product maintenance documents.

# Columns

	Name	Data type	Ν	Description / Attributes
?	DocumentNode	hierarchyid		Primary key for Document records.
	DocumentLevel	smallint	N	Depth in the document hierarchy. Computed: [DocumentNode].[GetLevel]()
	Title	nvarchar(50)		Title of the document.
	Owner	int		Employee who controls the document. Foreign key to Employee.BusinessEntityID
	FolderFlag	bit		0 = This is a folder, 1 = This is a document. Default: 0
	FileName	nvarchar(400)		File name of the document
	FileExtension	nvarchar(8)		File extension indicating the document type. For example, .doc or .txt.
	Revision	nchar(5)		Revision number of the document.
	ChangeNumber	int		Engineering change approval number. Default: 0
	Status	tinyint		1 = Pending approval, 2 = Approved, 3 = Obsolete
	DocumentSummary	nvarchar(MAX)	N	Document abstract.
	Document	varbinary(MAX)	N	Complete document.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Required for FileStream. Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

# Linked from

	Table	Join	Title / Name / Description
+	Production.ProductDocument	Production.Document.DocumentNode = Production.ProductDocument.DocumentNode	FK_ProductDocument_DocumentNode Foreign key constraint referencing Document.DocumentNode.

Columns		Name / Description
Ŷ	DocumentNode PK_Document_DocumentNode Primary key (clustered) constraint	
P	DocumentLevel, DocumentNode	AK_Document_DocumentLevel_DocumentNode Unique nonclustered index.
P	rowguid	AK_Document_rowguid Unique nonclustered index. Used to support FileStream.
9	rowguid	UQ_Document_F73921F793071A63

#### Used by

	Name		
Production.Document			

## 5.1.3. Table: Production.Illustration

# Bicycle assembly diagrams.

#### Columns

	Name	Data type	Ν	Description / Attributes
9	IllustrationID	int		Primary key for Illustration records. Identity / Auto increment column
	Diagram	xml	N	Illustrations used in manufacturing instructions. Stored as XML.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
~	Production.ProductModellllustratio n	Production.lllustration.lllustrationID = Production.ProductModellllustration.lll ustrationID	FK_ProductModellllustration_Illustration_IllustrationID Foreign key constraint referencing Illustration.IllustrationID.

# Unique keys

	Columns	Name / Description
P	IllustrationID	PK_Illustration_IllustrationID Primary key (clustered) constraint

# Used by

	Name	
m Production.Illustration		
■ Production.ProductModelIllustration		

# 5.1.4. Table: Production.Product

Products sold or used in the manfacturing of sold products.

#### Columns

	Name	Data type	Ν	Description / Attributes
P	ProductID	int		Primary key for Product records. Identity / Auto increment column
	Name	nvarchar(50)		Name of the product.
	ProductNumber	nvarchar(25)		Unique product identification number.
	MakeFlag	bit		0 = Product is purchased, 1 = Product is manufactured in-house. Default: 1
	Finished Goods Flag	bit		0 = Product is not a salable item. 1 = Product is salable. Default: 1
	Color	nvarchar(15)	N	Product color.
	SafetyStockLevel	smallint		Minimum inventory quantity.
	ReorderPoint	smallint		Inventory level that triggers a purchase order or work order.
	StandardCost	money		Standard cost of the product.
	ListPrice	money		Selling price.
	Size	nvarchar(5)	N	Product size.
	SizeUnitMeasureCode	nchar(3)	N	Unit of measure for Size column.
	WeightUnitMeasureCode	nchar(3)	N	Unit of measure for Weight column.
	Weight	decimal(8, 2)	N	Product weight.
	DaysToManufacture	int		Number of days required to manufacture the product.
	ProductLine	nchar(2)	N	R = Road, M = Mountain, T = Touring, S = Standard
	Class	nchar(2)	N	H = High, M = Medium, L = Low
	Style	nchar(2)	N	W = Womens, M = Mens, U = Universal
	ProductSubcategoryID	int	N	Product is a member of this product subcategory. Foreign key to ProductSubCategory.ProductSubCategoryID.
	ProductModelID	int	N	Product is a member of this product model. Foreign key to ProductModel.ProductModelID.
	SellStartDate	datetime		Date the product was available for sale.
	SellEndDate	datetime	N	Date the product was no longer available for sale.
	DiscontinuedDate	datetime	N	Date the product was discontinued.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.ProductModel	Production.Product.ProductModelID = Production.ProductModel.ProductModelID	FK_Product_ProductModel_ProductModelID Foreign key constraint referencing ProductModel.ProductModelID.
<b>&gt;</b>	Production.ProductSubcategory	Production.Product.ProductSubcatego ryID = Production.ProductSubcategory.Produ ctSubcategoryID	FK_Product_ProductSubcategory_ProductSubcategoryID Foreign key constraint referencing ProductSubcategory.ProductSubcategoryID.

	Table Join		Title / Name / Description
<b>&gt;</b>	Production. Unit Measure	Production.Product.SizeUnitMeasureC ode = Production.UnitMeasure.UnitMeasure Code	FK_Product_UnitMeasure_SizeUnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.
<b>&gt;</b>	Production.UnitMeasure	Production.Product.WeightUnitMeasur eCode = Production.UnitMeasure.UnitMeasure Code	FK_Product_UnitMeasure_WeightUnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.

## Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Production.BillOfMaterials	Production.Product.ProductID = Production.BillOfMaterials.Component ID	FK_BillOfMaterials_Product_ComponentID Foreign key constraint referencing Product.ProductAssemblyID.
~	Production. Bill Of Materials	Production.Product.ProductID = Production.BillOfMaterials.ProductAss emblyID	FK_BillOfMaterials_Product_ProductAssemblyID Foreign key constraint referencing Product.ProductAssemblyID.
+	Production.ProductCostHistory	Production.Product.ProductID = Production.ProductCostHistory.ProductID	FK_ProductCostHistory_Product_ProductID Foreign key constraint referencing Product.ProductID.
<b>+</b>	Production.ProductDocument	Production.Product.ProductID = Production.ProductDocument.Product ID	FK_ProductDocument_Product_ProductID Foreign key constraint referencing Product.ProductID.
<b>+</b>	Production.ProductInventory	Production.Product.ProductID = Production.ProductInventory.ProductI D	FK_ProductInventory_Product_ProductID Foreign key constraint referencing Product.ProductID.
~	Production.ProductListPriceHistory	Production.Product.ProductID = Production.ProductListPriceHistory.Pro ductID	FK_ProductListPriceHistory_Product_ProductID Foreign key constraint referencing Product.ProductID.
<b>+</b>	Production.ProductProductPhoto	Production.Product.ProductID = Production.ProductProductPhoto.Prod uctID	FK_ProductProductPhoto_Product_ProductID Foreign key constraint referencing Product.ProductID.
+	Production.ProductReview	Production.Product.ProductID = Production.ProductReview.ProductID	FK_ProductReview_Product_ProductID Foreign key constraint referencing Product.ProductID.
+	Purchasing.ProductVendor	Production.Product.ProductID = Purchasing.ProductVendor.ProductID	FK_ProductVendor_Product_ProductID Foreign key constraint referencing Product.ProductID.
~	Purchasing. Purchase Order Detail	Production.Product.ProductID = Purchasing.PurchaseOrderDetail.ProductID	FK_PurchaseOrderDetail_Product_ProductID Foreign key constraint referencing Product.ProductID.
4	Sales.SalesOrderDetail	Production.Product.ProductID = Sales.SalesOrderDetail.ProductID	User-defined relation
+	Sales.ShoppingCartItem	Production.Product.ProductID = Sales.ShoppingCartItem.ProductID	FK_ShoppingCartItem_Product_ProductID Foreign key constraint referencing Product.ProductID.
+	Sales. Special Offer Product	Production.Product.ProductID = Sales.SpecialOfferProduct.ProductID	FK_SpecialOfferProduct_ProductID Foreign key constraint referencing Product.ProductID.
<b>*</b>	Production.TransactionHistory	Production.Product.ProductID = Production.TransactionHistory.Product ID	FK_TransactionHistory_Product_ProductID Foreign key constraint referencing Product.ProductID.
4	Production.TransactionHistoryArchi ve	Production.Product.ProductID = Production.TransactionHistoryArchive. ProductID	User-defined relation
+	Production.WorkOrder	Production.Product.ProductID = Production.WorkOrder.ProductID	FK_WorkOrder_Product_ProductID Foreign key constraint referencing Product.ProductID.

## Unique keys

	Columns	Name / Description
ProductID  ProductID  Primary key (clustered) constraint		
P	Name	AK_Product_Name Unique nonclustered index.
ProductNumber  AK_Product_ProductNumber Unique nonclustered index.		
٩	rowguid	AK_Product_rowguid Unique nonclustered index. Used to support replication samples.

#### Uses

Name Name
Production.Product
☐ Production.ProductModel
☐ Production.ProductSubcategory
☐ Production.UnitMeasure
☐ Production.UnitMeasure

# Used by

	Name
■ Production.Product	
■ Production.BillOfMaterials	
■ Production.BillOfMaterials	
■ Production.ProductCostHistory	
■ Production.ProductDocument	
■ Production.ProductInventory	
■ Production.ProductListPriceHistory	
■ Production.ProductProductPhoto	
■ Production.ProductReview	
■ Production.TransactionHistory	
■ Production.TransactionHistoryArchive	
■ Production.WorkOrder	
■ Purchasing.ProductVendor	
■ Purchasing.PurchaseOrderDetail	
Sales.SalesOrderDetail	
Sales.ShoppingCartItem	
■ Sales.SpecialOfferProduct	

# 5.1.5. Table: Production.ProductCategory

High-level product categorization.

#### Columns

	Name	Data type	Ν	Description / Attributes
,	ProductCategoryID	int		Primary key for ProductCategory records. Identity / Auto increment column
	Name	nvarchar(50)		Category description.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Production.ProductSubcategory		FK_ProductSubcategory_ProductCategory_ProductCategoryID Foreign key constraint referencing ProductCategory.ProductCategoryID.

## Unique keys

	Columns	Name / Description
Ŷ	ProductCategoryID	PK_ProductCategory_ProductCategoryID Primary key (clustered) constraint
P	Name	AK_ProductCategory_Name Unique nonclustered index.
P	rowguid  AK_ProductCategory_rowguid  Unique nonclustered index. Used to support replication samples.	

## Used by

Name Name
Production.ProductCategory
☐ Production.ProductSubcategory

# 5.1.6. Table: Production.ProductDescription

## Product descriptions in several languages.

## Columns

	Name	Data type	Ν	Description / Attributes
?	ProductDescriptionID	int		Primary key for ProductDescription records. Identity / Auto increment column
	Description	nvarchar(400)		Description of the product.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

Generated with 🗐 Datædo

#### Linked from

	Table	Join	Title / Name / Description
~	Production.ProductModelProductD escriptionCulture	Production.ProductDescription.ProductDescriptionID = Production.ProductModelProductDescriptionCulture.ProductDescriptionID	FK_ProductModelProductDescriptionCulture_ProductDescription_ProductDescriptionID Foreign key constraint referencing ProductDescription.ProductDescriptionID.

# Unique keys

	Columns	Name / Description	
9	ProductDescriptionID	PK_ProductDescription_ProductDescriptionID Primary key (clustered) constraint	
9	rowguid	AK_ProductDescription_rowguid Unique nonclustered index. Used to support replication samples.	

## Used by

	Name
Production.ProductDescription	
☐ Production.ProductModelProductDescriptionCulture ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	

## 5.1.7. Table: Production.ProductDocument

Cross-reference table mapping products to related product documents.

#### Columns

	Name	Data type	Ν	Description / Attributes
P	ProductID	int		Product identification number. Foreign key to Product.ProductID.
Ŷ	DocumentNode	hierarchyid		Document identification number. Foreign key to Document.DocumentNode.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table Join		Title / Name / Description
<b>&gt;</b>	Production.Document	Production.ProductDocument.DocumentNode = Production.Document.DocumentNode	FK_ProductDocument_DocumentNode Foreign key constraint referencing Document.DocumentNode.
<b>&gt;</b>	Production.Product	Production.ProductDocument.Product ID = Production.Product.ProductID	FK_ProductDocument_Product_ProductID Foreign key constraint referencing Product.ProductID.

# Unique keys

	Columns	Name / Description		
P	ProductID, DocumentNode	PK_ProductDocument_ProductID_DocumentNode Primary key (clustered) constraint		

#### Uses

	Name
■ Production.Product	

## 5.1.8. Table: Production.ProductModel

#### Product model classification.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ProductModelID	int		Primary key for ProductModel records. Identity / Auto increment column
	Name	nvarchar(50)		Product model description.
	CatalogDescription	xml	N	Detailed product catalog information in xml format.
	Instructions	xml	N	Manufacturing instructions in xml format.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description	
4	Production.Product	Production.ProductModel.ProductMo delID = Production.Product.ProductModelID	FK_Product_ProductModel_ProductModelID Foreign key constraint referencing ProductModel.ProductModelID.	
4	Production.ProductModelIllustration	Production.ProductModel.ProductModelID = Production.ProductModelIllustration.ProductModelIID	FK_ProductModellllustration_ProductModel_ProductModelID Foreign key constraint referencing ProductModel.ProductModelID.	
~	Production.ProductModelProductD escriptionCulture	Production.ProductModel.ProductModelID = Production.ProductModelProductDescriptionCulture.ProductModelID	FK_ProductModelProductDescriptionCulture_ProductModel_ProductModelID Foreign key constraint referencing ProductModel.ProductModelID.	

# Unique keys

	Columns	Name / Description		
P	ProductModelID	PK_ProductModel_ProductModelID Primary key (clustered) constraint		
P	Name	AK_ProductModel_Name Unique nonclustered index.		
P	rowguid	AK_ProductModel_rowguid Unique nonclustered index. Used to support replication samples.		

#### Used by

	Name
■ Production.ProductModel	
■ Production.Product	
■ Production.ProductModelIllustration	
■ Production.ProductModelProductDescriptionCulture	

## 5.1.9. Table: Production.ProductModelIllustration

Cross-reference table mapping product models and illustrations.

#### Columns

Name	Data type	Ν	Description / Attributes
ProductModelID	int		Primary key. Foreign key to ProductModel.ProductModelID.
¶ IllustrationID	int		Primary key. Foreign key to Illustration.IllustrationID.
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.Illustration	Production.ProductModellllustration.lll ustrationID = Production.lllustration.lllustrationID	FK_ProductModellllustration_Illustration_IllustrationID Foreign key constraint referencing Illustration.IllustrationID.
<b>&gt;</b>	Production.ProductModel	Production.ProductModellllustration.Pr oductModelID = Production.ProductModel.ProductMo delID	FK_ProductModelIllustration_ProductModel_ProductModelID Foreign key constraint referencing ProductModel.ProductModelID.

## Unique keys

	Columns	Name / Description
Ŷ	ProductModelID, IllustrationID	PK_ProductModellllustration_ProductModelID_IllustrationID Primary key (clustered) constraint

#### Uses

	Name
Production.ProductModelIllustration	
☐ Production.Illustration ☐ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
■ Production.ProductModel	

# 5.1.10. Table: Production.ProductModelProductDescriptionCulture

Cross-reference table mapping product descriptions and the language the description is written in.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ProductModelID	int		Primary key. Foreign key to ProductModel.ProductModelID.
Ŷ	ProductDescriptionID	int		Primary key. Foreign key to ProductDescription.ProductDescriptionID.
Ŷ	CultureID	nchar(6)		Culture identification number. Foreign key to Culture.CultureID.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
>	Production.Culture	Production.ProductModelProductDesc riptionCulture.CultureID = Production.Culture.CultureID	FK_ProductModelProductDescriptionCulture_Culture_CultureID Foreign key constraint referencing Culture.CultureID.
>	Production.ProductDescription	Production.ProductModelProductDesc riptionCulture.ProductDescriptionID = Production.ProductDescription.Produc tDescriptionID	FK_ProductModelProductDescriptionCulture_ProductDescription_ProductDescriptionID Foreign key constraint referencing ProductDescription.ProductDescriptionID.

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.ProductModel	Production.ProductModelProductDesc riptionCulture.ProductModelID = Production.ProductModel.ProductMo delID	FK_ProductModelProductDescriptionCulture_ProductModel_ProductModelID Foreign key constraint referencing ProductModel.ProductModelID.

## Unique keys

Columns	Name / Description	
ProductModelID, ProductDescriptionID, CultureID	PK_ProductModelProductDescriptionCulture_ProductModelID_ProductDescriptionID_CultureID Primary key (clustered) constraint	

## Uses

Name	
Production.ProductModelProductDescriptionCulture	
■ Production.Culture	
☐ Production.ProductDescription	
■ Production.ProductModel	

## 5.1.11. Table: Production.ProductPhoto

## Product images.

### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ProductPhotoID	int		Primary key for ProductPhoto records. Identity / Auto increment column
	ThumbNailPhoto	varbinary(MAX)	N	Small image of the product.
	ThumbnailPhotoFileName	nvarchar(50)	N	Small image file name.
	LargePhoto	varbinary(MAX)	N	Large image of the product.
	LargePhotoFileName	nvarchar(50)	N	Large image file name.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
<b>←</b>	Production.ProductProductPhoto	Production.ProductPhoto.ProductPhot oID = Production.ProductProductPhoto.Prod uctPhotoID	FK_ProductProductPhoto_ProductPhoto_ProductPhotoID Foreign key constraint referencing ProductPhoto.ProductPhotoID.

# Unique keys

	Columns	Name / Description
Ŷ	ProductPhotoID	PK_ProductPhoto_ProductPhotoID Primary key (clustered) constraint

#### Used by

	Name Name
m Production	n.ProductPhoto
■ Produ	ction.ProductProductPhoto

#### 5.1.12. Table: Production.ProductProductPhoto

Cross-reference table mapping products and product photos.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ProductID	int		Product identification number. Foreign key to Product.ProductID.
P	ProductPhotoID	int		Product photo identification number. Foreign key to ProductPhoto.ProductPhotoID.
	Primary	bit		0 = Photo is not the principal image. 1 = Photo is the principal image. Default: 0
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.Product	Production.ProductProductPhoto.ProductID = Production.Product.ProductID	FK_ProductProductPhoto_Product_ProductID Foreign key constraint referencing Product.ProductID.
<b>&gt;</b>	Production.ProductPhoto	Production.ProductProductPhoto.Prod uctPhotoID = Production.ProductPhoto.ProductPhot oID	FK_ProductProductPhoto_ProductPhoto_ProductPhotoID Foreign key constraint referencing ProductPhoto.ProductPhotoID.

## Unique keys

	Columns	Name / Description
Ŷ	ProductID, ProductPhotoID	PK_ProductProductPhoto_ProductID_ProductPhotoID Primary key (clustered) constraint

#### Uses

Name
☐ Production.ProductProductPhoto
⊞ Production.Product
☐ Production.ProductPhoto

## 5.1.13. Table: Production.ProductReview

Customer reviews of products they have purchased.

	Name	Data type	Ν	Description / Attributes
(	ProductReviewID	int		Primary key for ProductReview records. Identity / Auto increment column
	ProductID	int		Product identification number. Foreign key to Product.ProductID.
	ReviewerName	nvarchar(50)		Name of the reviewer.
	ReviewDate	datetime		Date review was submitted. Default: getdate()
	EmailAddress	nvarchar(50)		Reviewer's e-mail address.
	Rating	int		Product rating given by the reviewer. Scale is 1 to 5 with 5 as the highest rating.

Name	Data type	Ν	Description / Attributes
Comments	nvarchar(3850)	N	Reviewer's comments
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

Table	Join	Title / Name / Description
→ Production.Product	Production.ProductReview.ProductID = Production.Product.ProductID	FK_ProductReview_Product_ProductID Foreign key constraint referencing Product.ProductID.

# Unique keys

	Columns	Name / Description
Ŷ	ProductReviewID	PK_ProductReview_ProductReviewID Primary key (clustered) constraint

#### Uses

Name
☐ Production.ProductReview
☐ Production.Product

## 5.1.14. Table: Production.ProductSubcategory

Product subcategories. See ProductCategory table.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ProductSubcategoryID	int		Primary key for ProductSubcategory records. Identity / Auto increment column
	ProductCategoryID	int		Product category identification number. Foreign key to ProductCategory.ProductCategoryID.
	Name	nvarchar(50)		Subcategory description.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
;	→ Production.ProductCategory	Production.ProductSubcategory.ProductCategoryID = Production.ProductCategory.ProductCategoryID	FK_ProductSubcategory_ProductCategory_ProductCategoryID Foreign key constraint referencing ProductCategory.ProductCategoryID.

### Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Production.Product		FK_Product_ProductSubcategory_ProductSubcategoryID Foreign key constraint referencing ProductSubcategory.ProductSubcategoryID.

# Unique keys

	Columns	Name / Description			
Ŷ	ProductSubcategoryID	PK_ProductSubcategory_ProductSubcategoryID Primary key (clustered) constraint			
9	Name	AK_ProductSubcategory_Name Unique nonclustered index.			
P	rowguid	AK_ProductSubcategory_rowguid Unique nonclustered index. Used to support replication samples.			

#### Uses

	Name	
■ Production.ProductSubcategory		
■ Production.ProductCategory		

#### Used by

	Name Name
Produc	tion.ProductSubcategory
■ Pro	duction.Product

## 5.1.15. Table: Production.UnitMeasure

## Unit of measure lookup table.

## Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	UnitMeasureCode	nchar(3)		Primary key.
	Name	nvarchar(50)		Unit of measure description.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Production. Bill Of Materials	Production.UnitMeasure.UnitMeasure Code = Production.BillOfMaterials.UnitMeasur eCode	FK_BillOfMaterials_UnitMeasure_UnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.
<b>+</b>	Production.Product	Production.UnitMeasure.UnitMeasure Code = Production.Product.SizeUnitMeasureC ode	FK_Product_UnitMeasure_SizeUnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.
<b>+</b>	Production.Product	Production.UnitMeasure.UnitMeasure Code = Production.Product.WeightUnitMeasur eCode	FK_Product_UnitMeasure_WeightUnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.
<b>+</b>	Purchasing.ProductVendor	Production.UnitMeasure.UnitMeasure Code = Purchasing.ProductVendor.UnitMeasureCode	FK_ProductVendor_UnitMeasure_UnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.

## Unique keys

	Columns	Name / Description
9	UnitMeasureCode	PK_UnitMeasure_UnitMeasureCode Primary key (clustered) constraint
9	Name	AK_UnitMeasure_Name Unique nonclustered index.

### Used by

Name
⊞ Production.UnitMeasure
■ Production.BillOfMaterials
□ Production.Product
☐ Purchasing.ProductVendor

## 5.2. Views

#### 5.2.1. View: Production.vProductAndDescription

Product names and descriptions. Product descriptions are provided in multiple languages.

#### Columns

Name	Data type	Ν	Description / Attributes
ProductID	int		
Name	nvarchar(50)		
ProductModel	nvarchar(50)		
CultureID	nchar(6)		
Description	nvarchar(400)		

## 5.2.2. View: Production.vProductModelCatalogDescription

Displays the content from each element in the xml column CatalogDescription for each product in the Production.ProductModel table that has catalog data.

Name	Data type	Ν	Description / Attributes
ProductModelID	int		Identity / Auto increment column
Name	nvarchar(50)		
Summary	nvarchar(MAX)	N	
Manufacturer	nvarchar(MAX)	N	
Copyright	nvarchar(30)	N	
ProductURL	nvarchar(256)	N	
WarrantyPeriod	nvarchar(256)	N	
WarrantyDescription	nvarchar(256)	N	
NoOfYears	nvarchar(256)	N	

Name	Data type	N	Description / Attributes
MaintenanceDescription	nvarchar(256)	N	
Wheel	nvarchar(256)	N	
Saddle	nvarchar(256)	N	
Pedal	nvarchar(256)	N	
BikeFrame	nvarchar(MAX)	N	
Crankset	nvarchar(256)	N	
PictureAngle	nvarchar(256)	N	
PictureSize	nvarchar(256)	N	
ProductPhotoID	nvarchar(256)	N	
Material	nvarchar(256)	N	
Color	nvarchar(256)	N	
ProductLine	nvarchar(256)	N	
Style	nvarchar(256)	N	
RiderExperience	nvarchar(1024)	N	
rowguid	uniqueidentifier		
ModifiedDate	datetime		

#### 5.2.3. View: Production.vProductModelInstructions

Displays the content from each element in the xml column Instructions for each product in the Production.ProductModel table that has manufacturing instructions.

#### Columns

Name	Data type	Ν	Description / Attributes
ProductModelID	int		Identity / Auto increment column
Name	nvarchar(50)		
Instructions	nvarchar(MAX)	N	
LocationID	int	N	
SetupHours	decimal(9, 4)	N	
MachineHours	decimal(9, 4)	N	
LaborHours	decimal(9, 4)	N	
LotSize	int	N	
Step	nvarchar(1024)	N	
rowguid	uniqueidentifier		
ModifiedDate	datetime		

## 5.3. Procedures

## 5.3.1. Procedure: dbo.uspGetBillOfMaterials

Uses a recursive query (common table expression) to generate a multilevel Bill of Material: all level 1 components of a level 0 assembly, all level 2 components of a level 1 assembly, and so on.

#### Input/Output

	Name	Data type	Description
•@	StartProductID	int	Input parameter for the stored procedure uspGetBillOfMaterials. Enter a valid ProductID from the Production.Product table.
•@	CheckDate	datetime	Input parameter for the stored procedure uspGetBillOfMaterials used to eliminate components not used after that date. Enter a valid date.

### 5.3.2. Procedure: dbo.uspGetWhereUsedProductID

Stored procedure using a recursive query to return all components or assemblies that directly or indirectly use the specified ProductID.

#### Input/Output

	Name	Data type	Description
<b>→</b> @	StartProductID	int	Input parameter for the stored procedure uspGetWhereUsedProductID. Enter a valid ProductID from the Production.Product table.
<b>→</b> @	CheckDate	datetime	Input parameter for the stored procedure uspGetWhereUsedProductID used to eliminate components not used after that date. Enter a valid date.

#### 5.4. Functions

#### 5.4.1. Function: dbo.ufnGetDocumentStatusText

Scalar function returning the text representation of the Status column in the Document table.

#### Input/Output

	Name	Data type	Description
<b>-</b> @	Returns	nvarchar(16)	Returns the text representation of the Status column
÷@	Status	tinyint	Input parameter for the scalar function ufnGetDocumentStatusText. Enter a valid integer.

#### 5.4.2. Function: dbo.ufnGetProductDealerPrice

Scalar function returning the dealer price for a given product on a particular order date.

#### Input/Output

	Name	Data type	Description
*@÷	Returns	money	
<b>→</b> @	ProductID	int	Input parameter for the scalar function ufnGetProductDealerPrice. Enter a valid ProductID from the Production.Product table.
→@	OrderDate	datetime	Input parameter for the scalar function ufnGetProductDealerPrice. Enter a valid order date.

#### 5.4.3. Function: dbo.ufnGetProductListPrice

Scalar function returning the list price for a given product on a particular order date.

#### Input/Output

	Name	Data type	Description
<b>-@</b>	Returns	money	
→@	ProductID	int	Input parameter for the scalar function ufnGetProductListPrice. Enter a valid ProductID from the Production.Product table.

	Name	Data type	Description
<b>→</b> @	OrderDate	datetime	Input parameter for the scalar function ufnGetProductListPrice. Enter a valid order date.

### 5.4.4. Function: dbo.ufnGetProductStandardCost

Scalar function returning the standard cost for a given product on a particular order date.

## Input/Output

	Name	Data type	Description
<b>-@</b> •	Returns	money	
<b>→</b> @	ProductID	int	Input parameter for the scalar function ufnGetProductStandardCost. Enter a valid ProductID from the Production.Product table.
<b>→</b> @	OrderDate	datetime	Input parameter for the scalar function ufnGetProductStandardCost. Enter a valid order date.

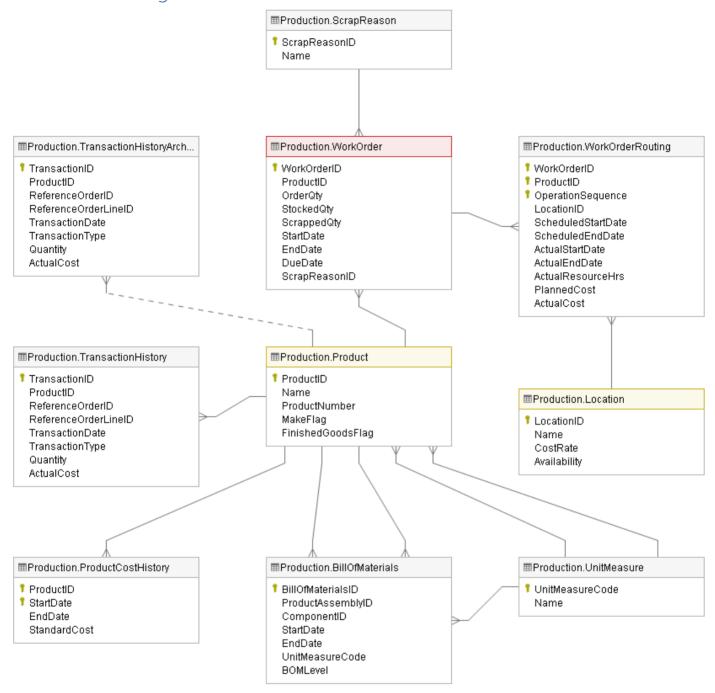
## 5.4.5. Function: dbo.ufnGetStock

Scalar function returning the quantity of inventory in LocationID 6 (Miscellaneous Storage) for a specified ProductID.

## Input/Output

	Name	Data type	Description
<b>-</b> @•	Returns	int	
<b>→</b> @	ProductID	int	Input parameter for the scalar function ufnGetStock. Enter a valid ProductID from the Production.ProductInventory table.

# 6. Manufacturing



#### 6.1. Tables

#### 6.1.1. Table: Production.BillOfMaterials

Items required to make bicycles and bicycle subassemblies. It identifies the heirarchical relationship between a parent product and its components.

	Name	Data type	Ν	Description / Attributes
1	BillOfMaterialsID	int		Primary key for BillOfMaterials records. Identity / Auto increment column
	ProductAssemblyID	int	N	Parent product identification number. Foreign key to Product.ProductID.
	ComponentID	int		Component identification number. Foreign key to Product.ProductID.

Name	Data type	Ν	Description / Attributes
StartDate	datetime		Date the component started being used in the assembly item. Default: getdate()
EndDate	datetime	N	Date the component stopped being used in the assembly item.
UnitMeasureCode	nchar(3)		Standard code identifying the unit of measure for the quantity.
BOMLevel	smallint		Indicates the depth the component is from its parent (AssemblyID).
PerAssemblyQty	decimal(8, 2)		Quantity of the component needed to create the assembly. Default: 1.00
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
>	Production.Product	Production.BillOfMaterials.Component ID = Production.Product.ProductID	FK_BillOfMaterials_Product_ComponentID Foreign key constraint referencing Product.ProductAssemblyID.
<b>&gt;</b>	Production.Product	Production.BillOfMaterials.ProductAss emblyID = Production.Product.ProductID	FK_BillOfMaterials_Product_ProductAssemblyID Foreign key constraint referencing Product.ProductAssemblyID.
<b>&gt;</b>	Production.UnitMeasure	Production.BillOfMaterials.UnitMeasur eCode = Production.UnitMeasure.UnitMeasure Code	FK_BillOfMaterials_UnitMeasure_UnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.

## Unique keys

		Columns	Name / Description	
	PK_BillOfMaterials BillOfMaterials D Primary key (clustered) constraint		_	
	ProductAssemblyID, ComponentID, StartDate  AK_BillOfMaterials_ProductAssemblyID_ComponentID_StartDate Clustered index.			

#### Uses

	Name
Production.BillOfMaterials	
■ Production.Product	
■ Production.Product	

# 6.1.2. Table: Production.ProductCostHistory

Changes in the cost of a product over time.

	Name	Data type	Ν	Description / Attributes
9	ProductID	int		Product identification number. Foreign key to Product.ProductID
?	StartDate	datetime		Product cost start date.
	EndDate	datetime	N	Product cost end date.
	StandardCost	money		Standard cost of the product.

Name	Data type	Ν	Description / Attributes
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

1	able	Join	Title / Name / Description
➤ Production.Proc	LICT	,	FK_ProductCostHistory_Product_ProductID Foreign key constraint referencing Product.ProductID.

## Unique keys

	Columns	Name / Description
P	ProductID, StartDate	PK_ProductCostHistory_ProductID_StartDate Primary key (clustered) constraint

#### Uses

	Name
■ Production.ProductCostHistory	

# 6.1.3. Table: Production.ProductListPriceHistory

Changes in the list price of a product over time.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ProductID	int		Product identification number. Foreign key to Product.ProductID
Ŷ	StartDate	datetime		List price start date.
	EndDate	datetime	N	List price end date
	ListPrice	money		Product list price.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.Product	Production.ProductListPriceHistory.Pro ductID = Production.Product.ProductID	FK_ProductListPriceHistory_Product_ProductID Foreign key constraint referencing Product.ProductID.

## Unique keys

	Columns	Name / Description
Ŷ	ProductID, StartDate	PK_ProductListPriceHistory_ProductID_StartDate Primary key (clustered) constraint

#### Uses

	Name
■ Production.ProductListPriceHistory	

## 6.1.4. Table: Production.ScrapReason

## Manufacturing failure reasons lookup table.

#### Columns

		Name	Data type	Ν	Description / Attributes
(	9	ScrapReasonID	smallint		Primary key for ScrapReason records. Identity / Auto increment column
		Name	nvarchar(50)		Failure description.
		ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Production.WorkOrder		FK_WorkOrder_ScrapReason_ScrapReasonID Foreign key constraint referencing ScrapReason.ScrapReasonID.

## Unique keys

Columns		Name / Description
Ŷ	ScrapReasonID	PK_ScrapReason_ScrapReasonID Primary key (clustered) constraint
P	Name	AK_ScrapReason_Name Unique nonclustered index.

### Used by

Name
Production.ScrapReason
☐ Production.WorkOrder

## 6.1.5. Table: Production.TransactionHistory

Record of each purchase order, sales order, or work order transaction year to date.

	Name	Data type	Ν	Description / Attributes
Ŷ	TransactionID	int		Primary key for TransactionHistory records. Identity / Auto increment column
	ProductID	int		Product identification number. Foreign key to Product.ProductID.
	ReferenceOrderID	int		Purchase order, sales order, or work order identification number.
	ReferenceOrderLineID	int		Line number associated with the purchase order, sales order, or work order.  Default: 0
	TransactionDate	datetime		Date and time of the transaction. Default: getdate()
	TransactionType	nchar(1)		W = WorkOrder, S = SalesOrder, P = PurchaseOrder
	Quantity	int		Product quantity.
	ActualCost	money		Product cost.

Name	Data type	Ν	Description / Attributes
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.Product	Production.TransactionHistory.Product ID = Production.Product.ProductID	FK_TransactionHistory_Product_ProductID Foreign key constraint referencing Product.ProductID.

## Unique keys

Columns		Name / Description
9		PK_TransactionHistory_TransactionID Primary key (clustered) constraint

#### Uses

	Name	
■ Production.TransactionHistory		

# 6.1.6. Table: Production.TransactionHistoryArchive

## Transactions for previous years.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	TransactionID	int		Primary key for TransactionHistoryArchive records.
	ProductID	int		Product identification number. Foreign key to Product.ProductID.
	ReferenceOrderID	int		Purchase order, sales order, or work order identification number.
	ReferenceOrderLineID	int		Line number associated with the purchase order, sales order, or work order.  Default: 0
	TransactionDate	datetime		Date and time of the transaction. Default: getdate()
	TransactionType	nchar(1)		W = Work Order, S = Sales Order, P = Purchase Order
	Quantity	int		Product quantity.
	ActualCost	money		Product cost.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

		Table	Join	Title / Name / Description
3	<b>&gt;</b> 1	Production.Product	Production.TransactionHistoryArchive. ProductID = Production.Product.ProductID	User-defined relation

## Unique keys

	Columns	Name / Description
Ŷ	TransactionID	PK_TransactionHistoryArchive_TransactionID Primary key (clustered) constraint

#### Uses

	Name
m Production.TransactionHistoryArchive	

## 6.1.7. Table: Production.WorkOrder

## Manufacturing work orders.

## Columns

	Name	Data type	Ν	Description / Attributes
9	WorkOrderID	int		Primary key for WorkOrder records. Identity / Auto increment column
	ProductID	int		Product identification number. Foreign key to Product.ProductID.
	OrderQty	int		Product quantity to build.
	StockedQty	int		Quantity built and put in inventory. Computed: isnull([OrderQty]-[ScrappedQty],(0))
	ScrappedQty	smallint		Quantity that failed inspection.
	StartDate	datetime		Work order start date.
	EndDate	datetime	N	Work order end date.
	DueDate	datetime		Work order due date.
	ScrapReasonID	smallint	N	Reason for inspection failure.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.Product	Production.WorkOrder.ProductID = Production.Product.ProductID	FK_WorkOrder_Product_ProductID Foreign key constraint referencing Product.ProductID.
<b>&gt;</b>	Production. ScrapReason	Production.WorkOrder.ScrapReasonID = Production.ScrapReason.ScrapReasonID D	FK_WorkOrder_ScrapReason_ScrapReasonID Foreign key constraint referencing ScrapReason.ScrapReasonID.

## Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Production.WorkOrderRouting	Production.WorkOrder.WorkOrderID  = Production.WorkOrderRouting.WorkOrderID	FK_WorkOrderRouting_WorkOrder_WorkOrderID Foreign key constraint referencing WorkOrder.WorkOrderID.

# Unique keys

57

Columns		Name / Description
1		PK_WorkOrder_WorkOrderID Primary key (clustered) constraint

Generated with 📳 Datædo

# Triggers

	Name	When	Description
4	iWorkOrder	After Insert	AFTER INSERT trigger that inserts a row in the TransactionHistory table.
4	uWorkOrder	After Update	AFTER UPDATE trigger that inserts a row in the TransactionHistory table, updates ModifiedDate in the WorkOrder table.

#### Uses

	Name
m Production.WorkOrder	
■ Production.Product	

## Used by

	Name
-	Production.WorkOrder
	■ Production.WorkOrderRouting

# 6.1.8. Table: Production.WorkOrderRouting

## Work order details.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	WorkOrderID	int		Primary key. Foreign key to WorkOrder.WorkOrderID.
9	ProductID	int		Primary key. Foreign key to Product.ProductID.
9	OperationSequence	smallint		Primary key. Indicates the manufacturing process sequence.
	LocationID	smallint		Manufacturing location where the part is processed. Foreign key to Location.LocationID.
	ScheduledStartDate	datetime		Planned manufacturing start date.
	ScheduledEndDate	datetime		Planned manufacturing end date.
	ActualStartDate	datetime	N	Actual start date.
	ActualEndDate	datetime	N	Actual end date.
	ActualResourceHrs	decimal(9, 4)	N	Number of manufacturing hours used.
	PlannedCost	money		Estimated manufacturing cost.
	ActualCost	money	N	Actual manufacturing cost.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	=   Production Location		FK_WorkOrderRouting_Location_LocationID Foreign key constraint referencing Location.LocationID.
<b>&gt;</b>	Production.WorkOrder	Production.WorkOrderRouting.WorkOrderID = Production.WorkOrder.WorkOrderID	FK_WorkOrderRouting_WorkOrder_WorkOrderID Foreign key constraint referencing WorkOrder.WorkOrderID.

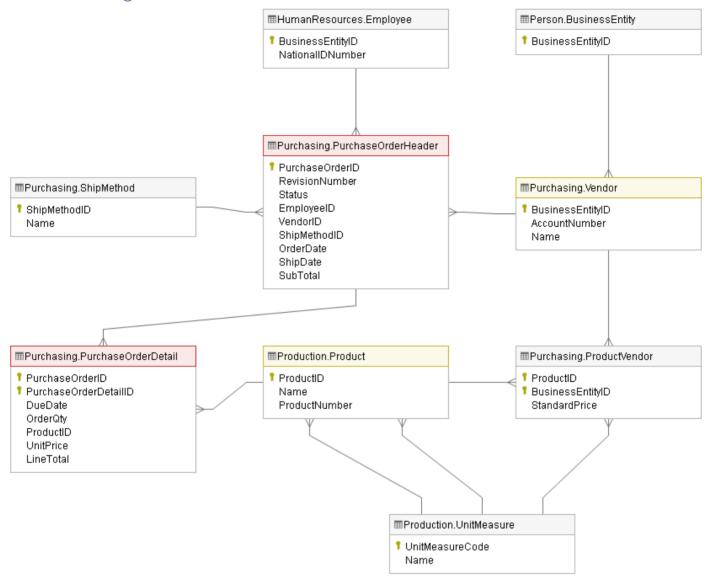
# Unique keys

	Columns	Name / Description			
Ŷ	WorkOrderID, ProductID, OperationSequence	PK_WorkOrderRouting_WorkOrderID_ProductID_OperationSequence Primary key (clustered) constraint			

## Uses

Na	me
Production.WorkOrderRouting	
Production.Location	

# 7. Purchasing



Vendors from who parts and products are purchased.

#### 7.1. Tables

#### 7.1.1. Table: Purchasing.ProductVendor

Cross-reference table mapping vendors with the products they supply.

	Name	Data type	Ν	Description / Attributes
9	ProductID	int		Primary key. Foreign key to Product.ProductID.
9	BusinessEntityID	int		Primary key. Foreign key to Vendor.BusinessEntityID.
	AverageLeadTime	int		The average span of time (in days) between placing an order with the vendor and receiving the purchased product.
	StandardPrice	money		The vendor's usual selling price.
	LastReceiptCost	money	N	The selling price when last purchased.
	LastReceiptDate	datetime	N	Date the product was last received by the vendor.
	MinOrderQty	int		The maximum quantity that should be ordered.

Name	Data type	Ν	Description / Attributes
MaxOrderQty	int		The minimum quantity that should be ordered.
OnOrderQty	int	N	The quantity currently on order.
UnitMeasureCode	nchar(3)		The product's unit of measure.
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
Production Product			FK_ProductVendor_Product_ProductID Foreign key constraint referencing Product.ProductID.
<b>&gt;</b>	Droduction UnitMeasure		FK_ProductVendor_UnitMeasure_UnitMeasureCode Foreign key constraint referencing UnitMeasure.UnitMeasureCode.
>	Purchasing. Vendor	Purchasing.ProductVendor.BusinessEntityID = Purchasing.Vendor.BusinessEntityID	FK_ProductVendor_Vendor_BusinessEntityID Foreign key constraint referencing Vendor.BusinessEntityID.

# Unique keys

Columns		Name / Description
Ŷ	Productil Elicineccentityii I	PK_ProductVendor_ProductID_BusinessEntityID Primary key (clustered) constraint

#### Uses

Name
Purchasing.ProductVendor
■ Production.Product
■ Production.UnitMeasure
■ Purchasing.Vendor

# 7.1.2. Table: Purchasing.PurchaseOrderDetail

Individual products associated with a specific purchase order. See PurchaseOrderHeader.

	Name	Data type	Ν	Description / Attributes
Ŷ	PurchaseOrderID	int		Primary key. Foreign key to PurchaseOrderHeader.PurchaseOrderID.
P	Purchase Order Detaill D	int		Primary key. One line number per purchased product. Identity / Auto increment column
	DueDate	datetime		Date the product is expected to be received.
	OrderQty	smallint		Quantity ordered.
	ProductID	int		Product identification number. Foreign key to Product.ProductID.
	UnitPrice	money		Vendor's selling price of a single product.
	LineTotal	money		Per product subtotal. Computed as OrderQty * UnitPrice. Computed: isnull([OrderQty]*[UnitPrice],(0.00))
	ReceivedQty	decimal(8, 2)		Quantity actually received from the vendor.

Name	Data type	Ν	Description / Attributes
RejectedQty	decimal(8, 2)		Quantity rejected during inspection.
StockedQty	decimal(9, 2)		Quantity accepted into inventory. Computed as ReceivedQty - RejectedQty. Computed: isnull([ReceivedQty]-[RejectedQty],(0.00))
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
<b>&gt;</b>	Production.Product	Purchasing.PurchaseOrderDetail.ProductID = Production.Product.ProductID	FK_PurchaseOrderDetail_Product_ProductID Foreign key constraint referencing Product.ProductID.
<b>&gt;</b>	Purchasing.PurchaseOrderHeader	Purchasing.PurchaseOrderDetail.Purch aseOrderID = Purchasing.PurchaseOrderHeader.Pur chaseOrderID	FK_PurchaseOrderDetail_PurchaseOrderHeader_PurchaseOrderID Foreign key constraint referencing PurchaseOrderHeader.PurchaseOrderID.

## Unique keys

	Columns	Name / Description	
1	Purchase Order ID, Purchase Order Detail ID	PK_PurchaseOrderDetail_PurchaseOrderID_PurchaseOrderDetailID Primary key (clustered) constraint	

## Triggers

		Name When		Description
ı	<b>4</b>	iPurchaseOrderDetail	After Insert	AFTER INSERT trigger that inserts a row in the TransactionHistory table and updates the PurchaseOrderHeader.SubTotal column.
	¥	uPurchaseOrderDetail	After Update	AFTER UPDATE trigger that inserts a row in the TransactionHistory table, updates ModifiedDate in PurchaseOrderDetail and updates the PurchaseOrderHeader.SubTotal column.

#### Uses

	Name
■ Purchasing.PurchaseOrderDetail	
■ Production.Product	
■ Purchasing.PurchaseOrderHeader	

## 7.1.3. Table: Purchasing.PurchaseOrderHeader

 ${\it General purchase order information. See Purchase Order Detail.}$ 

	Name	Data type	Ν	Description / Attributes
?	PurchaseOrderID	int		Primary key. Identity / Auto increment column
	RevisionNumber	tinyint		Incremental number to track changes to the purchase order over time.  Default: 0
	Status	tinyint		Order current status. 1 = Pending; 2 = Approved; 3 = Rejected; 4 = Complete Default: 1

Name	Data type	Ν	Description / Attributes
EmployeeID	int		Employee who created the purchase order. Foreign key to Employee.BusinessEntityID.
VendorID	int		Vendor with whom the purchase order is placed. Foreign key to Vendor.BusinessEntityID.
ShipMethodID	int		Shipping method. Foreign key to ShipMethod.ShipMethodID.
OrderDate	datetime		Purchase order creation date. Default: getdate()
ShipDate	datetime	N	Estimated shipment date from the vendor.
SubTotal	money		Purchase order subtotal. Computed as SUM (PurchaseOrderDetail.LineTotal)for the appropriate PurchaseOrderID. Default: 0.00
TaxAmt	money		Tax amount. Default: 0.00
Freight	money		Shipping cost. Default: 0.00
TotalDue	money		Total due to vendor. Computed as Subtotal + TaxAmt + Freight. Computed: isnull(([SubTotal]+[TaxAmt])+[Freight],(0))
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table Join		Title / Name / Description	
<b>&gt;</b>	Human Resources. Employee	Purchasing.PurchaseOrderHeader.Em ployeeID = HumanResources.Employee.BusinessE ntityID	FK_PurchaseOrderHeader_Employee_EmployeeID Foreign key constraint referencing Employee.EmployeeID.	
<b>&gt;</b>	Purchasing. Ship Method	Purchasing.PurchaseOrderHeader.Shi pMethodID = Purchasing.ShipMethod.ShipMethodID	FK_PurchaseOrderHeader_ShipMethod_ShipMethodID Foreign key constraint referencing ShipMethod.ShipMethodID.	
<b>&gt;</b>	Purchasing. Vendor	Purchasing.PurchaseOrderHeader.Ven dorID = Purchasing.Vendor.BusinessEntityID	FK_PurchaseOrderHeader_Vendor_VendorID Foreign key constraint referencing Vendor.VendorID.	

## Linked from

	Table	Join	Title / Name / Description
<b>←</b>	Purchasing. Purchase Order Detail	Purchasing.PurchaseOrderHeader.Pur chaseOrderID = Purchasing.PurchaseOrderDetail.Purch aseOrderID	FK_PurchaseOrderDetail_PurchaseOrderHeader_PurchaseOrderID Foreign key constraint referencing PurchaseOrderHeader.PurchaseOrderID.

# Unique keys

Columns		Name / Description
P	PurchaseOrderID	PK_PurchaseOrderHeader_PurchaseOrderID Primary key (clustered) constraint

# Triggers

	Name	When	Description
4	uPurchaseOrderHeader		AFTER UPDATE trigger that updates the RevisionNumber and ModifiedDate columns in the PurchaseOrderHeader table.

#### Uses

Name
Purchasing.PurchaseOrderHeader
## HumanResources.Employee
☐ Purchasing.ShipMethod
EIII Purchasing.Vendor

# Used by

	Name	
Purchasing.PurchaseOrderHeader		
■ Purchasing.PurchaseOrderDetail		

# 7.1.4. Table: Purchasing.ShipMethod

## Shipping company lookup table.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ShipMethodID	int		Primary key for ShipMethod records. Identity / Auto increment column
	Name	nvarchar(50)		Shipping company name.
	ShipBase	money		Minimum shipping charge. Default: 0.00
	ShipRate	money		Shipping charge per pound. Default: 0.00
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
<b>~</b>	Purchasing.PurchaseOrderHeader	Purchasing.ShipMethod.ShipMethodID = Purchasing.PurchaseOrderHeader.ShipMethodID	FK_PurchaseOrderHeader_ShipMethod_ShipMethodID Foreign key constraint referencing ShipMethod.ShipMethodID.
<b>~</b>	Sales.SalesOrderHeader	Purchasing.ShipMethod.ShipMethodID = Sales.SalesOrderHeader.ShipMethodI D	FK_SalesOrderHeader_ShipMethod_ShipMethodID Foreign key constraint referencing ShipMethod.ShipMethodID.

# Unique keys

	Columns	Name / Description
1		PK_ShipMethod_ShipMethodID Primary key (clustered) constraint
1		AK_ShipMethod_Name Unique nonclustered index.

	Columns	Name / Description
9	rowguid	AK_ShipMethod_rowguid Unique nonclustered index. Used to support replication samples.

## Used by

N <sub>i</sub>	ame
m Purchasing.ShipMethod	
□ Purchasing.PurchaseOrderHeader	

# 7.1.5. Table: Purchasing. Vendor

Companies from whom Adventure Works Cycles purchases parts or other goods.

## Columns

	Name	Data type	Ν	Description / Attributes
P	BusinessEntityID	int		Primary key for Vendor records. Foreign key to BusinessEntity.BusinessEntityID
	AccountNumber	nvarchar(15)		Vendor account (identification) number.
	Name	nvarchar(50)		Company name.
	CreditRating	tinyint		1 = Superior, 2 = Excellent, 3 = Above average, 4 = Average, 5 = Below average
	PreferredVendorStatus	bit		0 = Do not use if another vendor is available. 1 = Preferred over other vendors supplying the same product.  Default: 1
	ActiveFlag	bit		0 = Vendor no longer used. 1 = Vendor is actively used. Default: 1
	PurchasingWebServiceURL	nvarchar(1024)	N	Vendor URL.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
>	Person.BusinessEntity	,	FK_Vendor_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID

#### Linked from

	Table	Join	Title / Name / Description
+	Purchasing.ProductVendor	Purchasing. Vendor. Business Entity ID = Purchasing. Product Vendor. Business Entity ID	FK_ProductVendor_Vendor_BusinessEntityID Foreign key constraint referencing Vendor.BusinessEntityID.
+	Purchasing.PurchaseOrderHeader	Purchasing.Vendor.BusinessEntityID = Purchasing.PurchaseOrderHeader.Ven dorID	FK_PurchaseOrderHeader_Vendor_VendorID Foreign key constraint referencing Vendor.VendorID.

## Unique keys

	Columns	Name / Description
P	BusinessEntityID	PK_Vendor_BusinessEntityID Primary key (clustered) constraint

	Columns	Name / Description
Ŷ		AK_Vendor_AccountNumber Unique nonclustered index.

### Triggers

	Name	When	Description
4	dVendor	Instead Of Delete	INSTEAD OF DELETE trigger which keeps Vendors from being deleted.

#### Uses

	Name	
Purchasing.Vendor		
Person.BusinessEntity		

#### Used by

	Name
Purchasing. Vendor	
■ Purchasing.ProductVendor	
■ Purchasing.PurchaseOrderHeader	

## 7.2. Views

## 7.2.1. View: Purchasing.vVendorWithAddresses

Vendor (company) names and addresses .

#### Columns

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Name	nvarchar(50)		
AddressType	nvarchar(50)		
AddressLine1	nvarchar(60)		
AddressLine2	nvarchar(60)	N	
City	nvarchar(30)		
StateProvinceName	nvarchar(50)		
PostalCode	nvarchar(15)		
CountryRegionName	nvarchar(50)		

## 7.2.2. View: Purchasing.vVendorWithContacts

Vendor (company) names and the names of vendor employees to contact.

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Name	nvarchar(50)		
ContactType	nvarchar(50)		

Name	Data ty	vpe N	Description / Attributes
Title	nvarchar(8)	N	
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
Suffix	nvarchar(10)	N	
PhoneNumber	nvarchar(25)	N	
PhoneNumberType	nvarchar(50)	N	
EmailAddress	nvarchar(50)	N	
EmailPromotion	int		

## 7.3. Functions

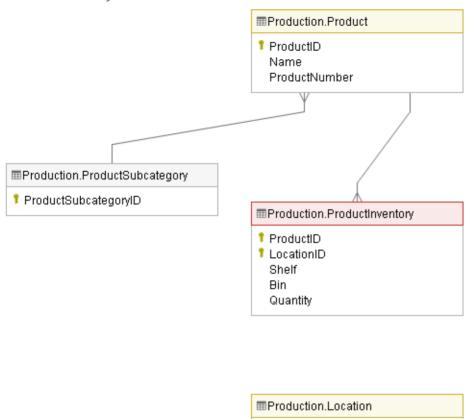
## 7.3.1. Function: dbo.ufnGetPurchaseOrderStatusText

Scalar function returning the text representation of the Status column in the PurchaseOrderHeader table.

## Input/Output

	Name	Data type	Description
<b>-</b> @•	Returns	nvarchar(15)	
→@	Status	tinyint	Input parameter for the scalar function ufnGetPurchaseOrdertStatusText. Enter a valid integer.

# 8. Inventory



I LocationID Name CostRate Availability

## 8.1. Tables

#### 8.1.1. Table: Production.Location

#### Product inventory and manufacturing locations.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	LocationID	smallint		Primary key for Location records. Identity / Auto increment column
	Name	nvarchar(50)		Location description.
	CostRate	smallmoney		Standard hourly cost of the manufacturing location. Default: 0.00
	Availability	decimal(8, 2)		Work capacity (in hours) of the manufacturing location. Default: 0.00
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table Join		Title / Name / Description
+	Production.ProductInventory	Production.Location.LocationID = Production.ProductInventory.LocationI D	FK_ProductInventory_Location_LocationID Foreign key constraint referencing Location.LocationID.

	Table Join		Title / Name / Description
-			FK_WorkOrderRouting_Location_LocationID Foreign key constraint referencing Location.LocationID.

## Unique keys

	Columns	Name / Description
PK_Location_LocationID Primary key (clustered) constraint		
Ŷ		AK_Location_Name Unique nonclustered index.

# Used by

Name
☐ Production.ProductInventory
☐ Production.WorkOrderRouting

# 8.1.2. Table: Production.ProductInventory

## Product inventory information.

### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ProductID	int		Product identification number. Foreign key to Product.ProductID.
Ŷ	LocationID	smallint		Inventory location identification number. Foreign key to Location.LocationID.
	Shelf	nvarchar(10)		Storage compartment within an inventory location.
	Bin	tinyint		Storage container on a shelf in an inventory location.
	Quantity	smallint		Quantity of products in the inventory location. Default: 0
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>			FK_ProductInventory_Location_LocationID Foreign key constraint referencing Location.LocationID.
<b>&gt;</b>			FK_ProductInventory_Product_ProductID Foreign key constraint referencing Product.ProductID.

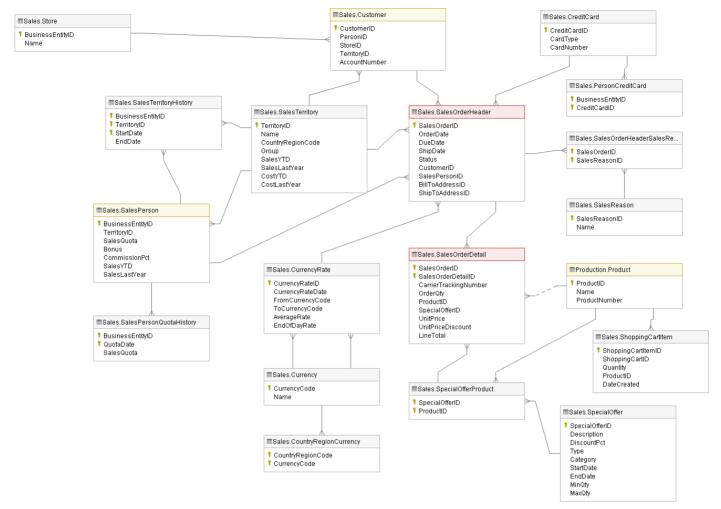
## Unique keys

	Columns	Name / Description		
Ŷ	ProductID, LocationID	PK_ProductInventory_ProductID_LocationID Primary key (clustered) constraint		

#### Uses

1	Name			
■ Production.ProductInventory				
■ Production.Location				
□ Production.Product				

### 9. Sales



Sales module holds information about shopping cart, sales orders, special offers and sales people.

### 9.1. Tables

## 9.1.1. Table: Sales.CountryRegionCurrency

Cross-reference table mapping ISO currency codes to a country or region.

#### Columns

	Name	Data type	Ν	Description / Attributes
9	CountryRegionCode	nvarchar(3)		ISO code for countries and regions. Foreign key to CountryRegion.CountryRegionCode.
١	CurrencyCode	nchar(3)		ISO standard currency code. Foreign key to Currency.CurrencyCode.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.CountryRegion	Sales.CountryRegionCurrency.Country RegionCode = Person.CountryRegion.CountryRegion Code	FK_CountryRegionCurrency_CountryRegion_CountryRegionCode Foreign key constraint referencing CountryRegion.CountryRegionCode.

	Table	Join	Title / Name / Description
<b>&gt;</b>	Sales.Currency	Sales.CountryRegionCurrency.Currenc yCode = Sales.Currency.CurrencyCode	FK_CountryRegionCurrency_Currency_CurrencyCode Foreign key constraint referencing Currency.CurrencyCode.

## Unique keys

	Columns	Name / Description
9	CountryRegionCode, CurrencyCode	PK_CountryRegionCurrency_CountryRegionCode_CurrencyCode Primary key (clustered) constraint

#### Uses

	Name
■ Sales.CountryRegionCurrency	
■ Person.CountryRegion	
■ Sales.Currency	

## 9.1.2. Table: Sales.CreditCard

#### Customer credit card information.

#### Columns

	Name	Data type	Ν	Description / Attributes
P	CreditCardID	int		Primary key for CreditCard records. Identity / Auto increment column
	CardType	nvarchar(50)		Credit card name.
	CardNumber	nvarchar(25)		Credit card number.
	ExpMonth	tinyint		Credit card expiration month.
	ExpYear	smallint		Credit card expiration year.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
+	Sales.PersonCreditCard	Sales.CreditCard.CreditCardID = Sales.PersonCreditCard.CreditCardID	FK_PersonCreditCard_CreditCard_CreditCardID Foreign key constraint referencing CreditCard.CreditCardID.
+	Sales.SalesOrderHeader	Sales.CreditCard.CreditCardID = Sales.SalesOrderHeader.CreditCardID	FK_SalesOrderHeader_CreditCard_CreditCardID Foreign key constraint referencing CreditCard.CreditCardID.

# Unique keys

Columns		Name / Description
(	<b>?</b> CreditCardID	PK_CreditCard_CreditCardID Primary key (clustered) constraint
	<b>♀</b> CardNumber	AK_CreditCard_CardNumber Unique nonclustered index.

#### Used by

	Name
■ Sales.CreditCard	

Name Name	
■ Sales.PersonCreditCard	

# 9.1.3. Table: Sales.Currency

## Lookup table containing standard ISO currencies.

#### Columns

	Name	Data type	Ν	Description / Attributes
•	<b>↑</b> CurrencyCode	nchar(3)		The ISO code for the Currency.
	Name	nvarchar(50)		Currency name.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description
~	Sales.CountryRegionCurrency	Sales.Currency.CurrencyCode = Sales.CountryRegionCurrency.Currenc yCode	FK_CountryRegionCurrency_Currency_CurrencyCode Foreign key constraint referencing Currency.CurrencyCode.
<b>~</b>	Sales.CurrencyRate	Sales.Currency.CurrencyCode = Sales.CurrencyRate.FromCurrencyCod e	FK_CurrencyRate_Currency_FromCurrencyCode Foreign key constraint referencing Currency.FromCurrencyCode.
~	Sales.CurrencyRate	Sales.Currency.CurrencyCode = Sales.CurrencyRate.ToCurrencyCode	FK_CurrencyRate_Currency_ToCurrencyCode Foreign key constraint referencing Currency.FromCurrencyCode.

## Unique keys

Columns		Name / Description
9	CurrencyCode	PK_Currency_CurrencyCode Primary key (clustered) constraint
9	Name	AK_Currency_Name Unique nonclustered index.

## Used by

	Name
■ Sales.Currency	
■ Sales.CountryRegionCurrency	
■ Sales.CurrencyRate	
■ Sales.CurrencyRate	

# 9.1.4. Table: Sales.CurrencyRate

## Currency exchange rates.

Name	Data type	Ν	Description / Attributes
<b>↑</b> CurrencyRateID	int		Primary key for CurrencyRate records. Identity / Auto increment column
CurrencyRateDate	datetime		Date and time the exchange rate was obtained.

Name	Data type	Ν	Description / Attributes
FromCurrencyCode	nchar(3)		Exchange rate was converted from this currency code.
ToCurrencyCode	nchar(3)		Exchange rate was converted to this currency code.
AverageRate	money		Average exchange rate for the day.
EndOfDayRate	money		Final exchange rate for the day.
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
<b>&gt;</b>	Sales.Currency	Sales.CurrencyRate.FromCurrencyCod e = Sales.Currency.CurrencyCode	FK_CurrencyRate_Currency_FromCurrencyCode Foreign key constraint referencing Currency.FromCurrencyCode.
<b>&gt;</b>	Sales.Currency	Sales.CurrencyRate.ToCurrencyCode = Sales.Currency.CurrencyCode	FK_CurrencyRate_Currency_ToCurrencyCode Foreign key constraint referencing Currency.FromCurrencyCode.

## Linked from

	Table	Join	Title / Name / Description
+	Sales. Sales Order Header		FK_SalesOrderHeader_CurrencyRate_CurrencyRateID Foreign key constraint referencing CurrencyRate.CurrencyRateID.

# Unique keys

	Columns	Name / Description
Ŷ	CurrencyRateID	PK_CurrencyRate_CurrencyRateID Primary key (clustered) constraint
Ŷ	CurrencyRateDate, FromCurrencyCode, ToCurrencyCode	AK_CurrencyRate_CurrencyRateDate_FromCurrencyCode_ToCurrencyCode Unique nonclustered index.

#### Uses

	Name
■ Sales.Currency	
■ Sales.Currency	

# Used by

	Name
■ Sales.CurrencyRate	
■ Sales.SalesOrderHeader	

## 9.1.5. Table: Sales.Customer

Current customer information. Also see the Person and Store tables.

	Name	Data type	N	Description / Attributes
Ŷ	CustomerID	int		Primary key. Identity / Auto increment column

Name	Data type	Ν	Description / Attributes
PersonID	int	N	Foreign key to Person.BusinessEntityID
StoreID	int	N	Foreign key to Store.BusinessEntityID
TerritoryID	int	N	ID of the territory in which the customer is located. Foreign key to SalesTerritory.SalesTerritoryID.
AccountNumber	varchar(10)		Unique number identifying the customer assigned by the accounting system.  Computed: isnull('AW'+[ufnLeadingZeros]([CustomerID]),'')
rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.Person	Sales.Customer.PersonID = Person.Person.BusinessEntityID	FK_Customer_Person_PersonID Foreign key constraint referencing Person.BusinessEntityID.
<b>&gt;</b>	Sales.SalesTerritory	Sales.Customer.TerritoryID = Sales.SalesTerritory.TerritoryID	FK_Customer_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.
<b>&gt;</b>	Sales.Store	Sales.Customer.StoreID = Sales.Store.BusinessEntityID	FK_Customer_Store_StoreID Foreign key constraint referencing Store.BusinessEntityID.

## Linked from

	Table	Join	Title / Name / Description
<b>+</b>	Sales.SalesOrderHeader	Sales.Customer.CustomerID = Sales.SalesOrderHeader.CustomerID	FK_SalesOrderHeader_Customer_CustomerID Foreign key constraint referencing Customer.CustomerID.

# Unique keys

	Columns	Name / Description
Ŷ	CustomerID	PK_Customer_CustomerID Primary key (clustered) constraint
P	AccountNumber	AK_Customer_AccountNumber Unique nonclustered index.
9	rowguid	AK_Customer_rowguid Unique nonclustered index. Used to support replication samples.

## Uses

Na	me
■ Sales.Customer	
⊞ Person.Person	
■ Sales.SalesTerritory	

# Used by

	Name
■ Sales.Customer	

#### 9.1.6. Table: Sales.PersonCreditCard

Cross-reference table mapping people to their credit card information in the CreditCard table.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Business entity identification number. Foreign key to Person.BusinessEntityID.
9	CreditCardID	int		Credit card identification number. Foreign key to CreditCard.CreditCardID.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Sales.CreditCard	Sales.PersonCreditCard.CreditCardID = Sales.CreditCard.CreditCardID	FK_PersonCreditCard_CreditCard_CreditCardID Foreign key constraint referencing CreditCard.CreditCardID.
>	Person.Person	Sales.PersonCreditCard.BusinessEntitylD = Person.Person.BusinessEntitylD	FK_PersonCreditCard_Person_BusinessEntityID Foreign key constraint referencing Person.BusinessEntityID.

## Unique keys

Columns		Name / Description
Ŷ	BusinessEntityID, CreditCardID	PK_PersonCreditCard_BusinessEntityID_CreditCardID Primary key (clustered) constraint

#### Uses

Name
⊞ Person.Person

#### 9.1.7. Table: Sales.SalesOrderDetail

Individual products associated with a specific sales order. See SalesOrderHeader.

	Name	Data type	Ν	Description / Attributes
?	SalesOrderID	int		Primary key. Foreign key to SalesOrderHeader.SalesOrderID.
P	Sales Order Detail ID	int		Primary key. One incremental unique number per product sold. Identity / Auto increment column
	CarrierTrackingNumber	nvarchar(25)	N	Shipment tracking number supplied by the shipper.
	OrderQty	smallint		Quantity ordered per product.
	ProductID	int		Product sold to customer. Foreign key to Product.ProductID.
	SpecialOfferID	int		Promotional code. Foreign key to SpecialOffer.SpecialOfferID.
	UnitPrice	money		Selling price of a single product.
	UnitPriceDiscount	money		Discount amount. Default: 0.0

Name	Data type	Ν	Description / Attributes
LineTotal	numeric(38, 6)		Per product subtotal. Computed as UnitPrice * (1 - UnitPriceDiscount) * OrderQty. Computed: isnull(([UnitPrice]*((1.0)-[UnitPriceDiscount]))*[OrderQty],(0.0))
rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
>2	Production.Product	Sales.SalesOrderDetail.ProductID = Production.Product.ProductID	User-defined relation
<b>&gt;</b>	Sales.SalesOrderHeader	Sales.SalesOrderDetail.SalesOrderID = Sales.SalesOrderHeader.SalesOrderID	FK_SalesOrderDetail_SalesOrderHeader_SalesOrderID Foreign key constraint referencing SalesOrderHeader.PurchaseOrderID.
<b>&gt;</b>	Sales.SpecialOfferProduct	Sales.SalesOrderDetail.SpecialOfferID  = Sales.SpecialOfferProduct.SpecialOfferID, Sales.SalesOrderDetail.ProductID = Sales.SpecialOfferProduct.ProductID	FK_SalesOrderDetail_SpecialOfferProduct_SpecialOfferIDProductID Foreign key constraint referencing SpecialOfferProduct.SpecialOfferIDProductID.

# Unique keys

Columns		Columns	Name / Description
	•	SalesOrderID, SalesOrderDetailID	PK_SalesOrderDetail_SalesOrderID_SalesOrderDetailID Primary key (clustered) constraint
	9	rowguid	AK_SalesOrderDetail_rowguid Unique nonclustered index. Used to support replication samples.

# Triggers

	Name	When	Description
4	iduSalesOrderDetail	After Insert, Update, Delete	AFTER INSERT, DELETE, UPDATE trigger that inserts a row in the TransactionHistory table, updates ModifiedDate in SalesOrderDetail and updates the SalesOrderHeader.SubTotal column.

## Uses

	Name
■ Sales.SalesOrderDetail	
☐ Production.Product ☐ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
■ Sales.SalesOrderHeader	
■ Sales.SpecialOfferProduct	

## 9.1.8. Table: Sales.SalesOrderHeader

## General sales order information.

	Name	Data type	Ν	Description / Attributes
Ŷ	SalesOrderID	int		Primary key. Identity / Auto increment column

	Name	Data type	Ν	Description / Attributes
	RevisionNumber	tinyint		Incremental number to track changes to the sales order over time. Default: 0
	OrderDate	datetime		Dates the sales order was created. Default: getdate()
	DueDate	datetime		Date the order is due to the customer.
	ShipDate	datetime	N	Date the order was shipped to the customer.
	Status	tinyint		Order current status. 1 = In process; 2 = Approved; 3 = Backordered; 4 = Rejected; 5 = Shipped; 6 = Cancelled Default: 1
	OnlineOrderFlag	bit		0 = Order placed by sales person. 1 = Order placed online by customer. Default: 1
:	Sales Order Number	nvarchar(25)		Unique sales order identification number. Computed: isnull(N'SO'+CONVERT([nvarchar](23),[SalesOrderID]),N'*** ERROR ***')
	PurchaseOrderNumber	nvarchar(25)	N	Customer purchase order number reference.
	AccountNumber	nvarchar(15)	N	Financial accounting number reference.
	CustomerID	int		Customer identification number. Foreign key to Customer.BusinessEntityID.
	SalesPersonID	int	N	Sales person who created the sales order. Foreign key to SalesPerson.BusinessEntityID.
	TerritoryID	int	N	Territory in which the sale was made. Foreign key to SalesTerritory.SalesTerritoryID.
	BillToAddressID	int		Customer billing address. Foreign key to Address.AddressID.
	ShipToAddressID	int		Customer shipping address. Foreign key to Address.AddressID.
	ShipMethodID	int		Shipping method. Foreign key to ShipMethod.ShipMethodID.
	CreditCardID	int	N	Credit card identification number. Foreign key to CreditCard.CreditCardID.
	CreditCardApprovalCode	varchar(15)	N	Approval code provided by the credit card company.
	CurrencyRateID	int	N	Currency exchange rate used. Foreign key to CurrencyRate.CurrencyRateID.
	SubTotal	money		Sales subtotal. Computed as SUM(SalesOrderDetail.LineTotal)for the appropriate SalesOrderID.  Default: 0.00
	TaxAmt	money		Tax amount. Default: 0.00
	Freight	money		Shipping cost. Default: 0.00
	TotalDue	money		Total due from customer. Computed as Subtotal + TaxAmt + Freight. Computed: isnull(([SubTotal]+[TaxAmt])+[Freight],(0))
	Comment	nvarchar(128)	N	Sales representative comments.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.Address	Sales.SalesOrderHeader.BillToAddressl D = Person.Address.AddressID	FK_SalesOrderHeader_Address_BillToAddressID Foreign key constraint referencing Address.AddressID.
<b>&gt;</b>	Person.Address	Sales.SalesOrderHeader.ShipToAddres sID = Person.Address.AddressID	FK_SalesOrderHeader_Address_ShipToAddressID Foreign key constraint referencing Address.AddressID.
<b>&gt;</b>	Sales.CreditCard	Sales.SalesOrderHeader.CreditCardID = Sales.CreditCard.CreditCardID	FK_SalesOrderHeader_CreditCard_CreditCardID Foreign key constraint referencing CreditCard.CreditCardID.
<b>&gt;</b>	Sales.CurrencyRate	Sales.SalesOrderHeader.CurrencyRateI D = Sales.CurrencyRate.CurrencyRateID	FK_SalesOrderHeader_CurrencyRate_CurrencyRateID Foreign key constraint referencing CurrencyRate.CurrencyRateID.
<b>&gt;</b>	Sales.Customer	Sales.SalesOrderHeader.CustomerID = Sales.Customer.CustomerID	FK_SalesOrderHeader_Customer_CustomerID Foreign key constraint referencing Customer.CustomerID.
<b>&gt;</b>	Sales.SalesPerson	Sales.SalesOrderHeader.SalesPersonID = Sales.SalesPerson.BusinessEntityID	FK_SalesOrderHeader_SalesPerson_SalesPersonID Foreign key constraint referencing SalesPerson.SalesPersonID.
<b>&gt;</b>	Sales.SalesTerritory	Sales.SalesOrderHeader.TerritoryID = Sales.SalesTerritory.TerritoryID	FK_SalesOrderHeader_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.
<b>&gt;</b>	Purchasing. Ship Method	Sales.SalesOrderHeader.ShipMethodI D = Purchasing.ShipMethod.ShipMethodID	FK_SalesOrderHeader_ShipMethod_ShipMethodID Foreign key constraint referencing ShipMethod.ShipMethodID.

## Linked from

	Table	Join	Title / Name / Description
+	Sales.SalesOrderDetail	Sales.SalesOrderHeader.SalesOrderID = Sales.SalesOrderDetail.SalesOrderID	FK_SalesOrderDetail_SalesOrderHeader_SalesOrderID Foreign key constraint referencing SalesOrderHeader.PurchaseOrderID.
<b>+</b>	Sales.SalesOrderHeaderSalesReaso n	Sales.SalesOrderHeader.SalesOrderID = Sales.SalesOrderHeaderSalesReason.SalesOrderID	FK_SalesOrderHeaderSalesReason_SalesOrderHeader_SalesOrderID Foreign key constraint referencing SalesOrderHeader.SalesOrderID.

## Unique keys

	Columns	Name / Description
SalesOrderID  PK_SalesOrderHeader_SalesOrderID  Primary key (clustered) constraint		
9	rowguid	AK_SalesOrderHeader_rowguid Unique nonclustered index. Used to support replication samples.
9	SalesOrderNumber	AK_SalesOrderHeader_SalesOrderNumber Unique nonclustered index.

# Triggers

	Name	When	Description
¥	uSalesOrderHeader	After Update	AFTER UPDATE trigger that updates the RevisionNumber and ModifiedDate columns in the SalesOrderHeader table.Updates the SalesYTD column in the SalesPerson and SalesTerritory tables.

Generated with 🗐 Datædo

#### Uses

	Name
⊞ Person.Address	
⊞ Person.Address	
■ Purchasing.ShipMethod	
■ Sales.CreditCard	
■ Sales.CurrencyRate	
■ Sales,Customer	
■ Sales.SalesTerritory	

#### Used by

	Name
■ Sales.SalesOrderHeader	
■ Sales.SalesOrderHeaderSalesReason	

## 9.1.9. Table: Sales.SalesOrderHeaderSalesReason

Cross-reference table mapping sales orders to sales reason codes.

#### Columns

	Name	Data type	Ν	Description / Attributes
P	SalesOrderID	int		Primary key. Foreign key to SalesOrderHeader.SalesOrderID.
P	SalesReasonID	int		Primary key. Foreign key to SalesReason.SalesReasonID.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Sales.SalesOrderHeader	Sales.SalesOrderHeaderSalesReason.S alesOrderID = Sales.SalesOrderHeader.SalesOrderID	FK_SalesOrderHeaderSalesReason_SalesOrderHeader_SalesOrderID Foreign key constraint referencing SalesOrderHeader.SalesOrderID.
<b>&gt;</b>	Sales.SalesReason	Sales.SalesOrderHeaderSalesReason.S alesReasonID = Sales.SalesReason.SalesReasonID	FK_SalesOrderHeaderSalesReason_SalesReason_SalesReasonID Foreign key constraint referencing SalesReason.SalesReasonID.

# Unique keys

	Columns	Name / Description
1	SalesOrderID, SalesReasonID	PK_SalesOrderHeaderSalesReason_SalesOrderID_SalesReasonID Primary key (clustered) constraint

#### Uses

	Name
■ Sales.SalesOrderHeader	
■ Sales.SalesReason	

## 9.1.10. Table: Sales.SalesPerson

## Sales representative current information.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Primary key for SalesPerson records. Foreign key to Employee.BusinessEntityID
	TerritoryID	int	N	Territory currently assigned to. Foreign key to SalesTerritory.SalesTerritoryID.
	SalesQuota	money	N	Projected yearly sales.
	Bonus	money		Bonus due if quota is met. Default: 0.00
	CommissionPct	smallmoney		Commision percent received per sale. Default: 0.00
	SalesYTD	money		Sales total year to date. Default: 0.00
	SalesLastYear	money		Sales total of previous year. Default: 0.00
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	HumanResources.Employee	Sales.SalesPerson.BusinessEntityID = HumanResources.Employee.BusinessEntityID	FK_SalesPerson_Employee_BusinessEntityID Foreign key constraint referencing Employee.EmployeeID.
<b>&gt;</b>	Sales.SalesTerritory	Sales.SalesPerson.TerritoryID = Sales.SalesTerritory.TerritoryID	FK_SalesPerson_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.

## Linked from

	Table	Join	Title / Name / Description
~	Sales.SalesOrderHeader	Sales.SalesPerson.BusinessEntityID = Sales.SalesOrderHeader.SalesPersonID	FK_SalesOrderHeader_SalesPerson_SalesPersonID Foreign key constraint referencing SalesPerson.SalesPersonID.
4	Sales.SalesPersonQuotaHistory	Sales.SalesPerson.BusinessEntityID = Sales.SalesPersonQuotaHistory.Busine ssEntityID	FK_SalesPersonQuotaHistory_SalesPerson_BusinessEntityID Foreign key constraint referencing SalesPerson.SalesPersonID.
4	Sales.SalesTerritoryHistory	Sales.SalesPerson.BusinessEntityID = Sales.SalesTerritoryHistory.BusinessEntityID	FK_SalesTerritoryHistory_SalesPerson_BusinessEntityID Foreign key constraint referencing SalesPerson.SalesPersonID.

Generated with 🗐 Datædo

	Table	Join	Title / Name / Description
+	Sales.Store	Sales.SalesPerson.BusinessEntityID = Sales.Store.SalesPersonID	FK_Store_SalesPerson_SalesPersonID Foreign key constraint referencing SalesPerson.SalesPersonID

# Unique keys

	Columns	Name / Description
Ŷ	BusinessEntityID PK_SalesPerson_BusinessEntityID Primary key (clustered) constraint	
Ŷ	rowguid	AK_SalesPerson_rowguid Unique nonclustered index. Used to support replication samples.

#### Uses

Name	
■ Sales.SalesPerson	
HumanResources.Employee	
■ Sales.SalesTerritory	

# Used by

N	lame
■ Sales.SalesPerson	
■ Sales.SalesPersonQuotaHistory	
■ Sales.SalesTerritoryHistory	
■ Sales.Store	

# 9.1.11. Table: Sales.SalesPersonQuotaHistory

## Sales performance tracking.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Sales person identification number. Foreign key to SalesPerson.BusinessEntityID.
Ŷ	QuotaDate	datetime		Sales quota date.
	SalesQuota	money		Sales quota amount.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Sales.SalesPerson	Sales.SalesPersonQuotaHistory.Busine ssEntityID = Sales.SalesPerson.BusinessEntityID	FK_SalesPersonQuotaHistory_SalesPerson_BusinessEntityID Foreign key constraint referencing SalesPerson.SalesPersonID.

# Unique keys

Columns		Name / Description
BusinessEntityID, QuotaDate  PK_SalesPersonQuotaHistory_BusinessEntityID_QuotaDate Primary key (clustered) constraint		
1		AK_SalesPersonQuotaHistory_rowguid Unique nonclustered index. Used to support replication samples.

#### Uses

	Name	
■ Sales.SalesPersonQuotaHistory		

## 9.1.12. Table: Sales.SalesReason

## Lookup table of customer purchase reasons.

#### Columns

	Name	Data type	Ν	Description / Attributes
P	SalesReasonID	int		Primary key for SalesReason records. Identity / Auto increment column
	Name	nvarchar(50)		Sales reason description.
	ReasonType	nvarchar(50)		Category the sales reason belongs to.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Linked from

	Table	Join	Title / Name / Description
-	Sales.SalesOrderHeaderSalesReaso	Salac Salac OrderHeaderSalac Peacon S	FK_SalesOrderHeaderSalesReason_SalesReason_SalesReasonID Foreign key constraint referencing SalesReason.SalesReasonID.

## Unique keys

	Columns	Name / Description
P	SalesReasonID	PK_SalesReason_SalesReasonID Primary key (clustered) constraint

## Used by

	Name
■ Sal	les.SalesReason
===	Sales.SalesOrderHeaderSalesReason

## 9.1.13. Table: Sales.SalesTaxRate

## Tax rate lookup table.

	Name	Data type	Ν	Description / Attributes
Ŷ	SalesTaxRateID	int		Primary key for SalesTaxRate records. Identity / Auto increment column

Name	Data type	Ν	Description / Attributes
StateProvinceID	int		State, province, or country/region the sales tax applies to.
ТахТуре	tinyint		1 = Tax applied to retail transactions, 2 = Tax applied to wholesale transactions, 3 = Tax applied to all sales (retail and wholesale) transactions.
TaxRate	smallmoney		Tax rate amount. Default: 0.00
Name	nvarchar(50)		Tax rate description.
rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table Join		Title / Name / Description
3	► Person StateProvince		FK_SalesTaxRate_StateProvince_StateProvinceID Foreign key constraint referencing StateProvince.StateProvinceID.

# Unique keys

	Columns	Name / Description	
Ŷ	SalesTaxRateID	PK_SalesTaxRate_SalesTaxRateID Primary key (clustered) constraint	
P	rowguid	AK_SalesTaxRate_rowguid Unique nonclustered index. Used to support replication samples.	
Ŷ	StateProvinceID, TaxType	AK_SalesTaxRate_StateProvinceID_TaxType Unique nonclustered index.	

#### Uses

	Name
■ Person.StateProvince	

# 9.1.14. Table: Sales.SalesTerritory

## Sales territory lookup table.

	Name	Data type	Ν	Description / Attributes
P	TerritoryID	int		Primary key for SalesTerritory records. Identity / Auto increment column
	Name	nvarchar(50)		Sales territory description
	CountryRegionCode	nvarchar(3)		ISO standard country or region code. Foreign key to CountryRegion.CountryRegionCode.
	Group	nvarchar(50)		Geographic area to which the sales territory belong.
	SalesYTD	money		Sales in the territory year to date. Default: 0.00
	SalesLastYear	money		Sales in the territory the previous year. Default: 0.00

Name	Data type	Ν	Description / Attributes
CostYTD	money		Business costs in the territory year to date. Default: 0.00
CostLastYear	money		Business costs in the territory the previous year. Default: 0.00
rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

	Table	Join	Title / Name / Description
<b>&gt;</b>	Person.CountryRegion	Sales.SalesTerritory.CountryRegionCo de = Person.CountryRegion.CountryRegion Code	FK_SalesTerritory_CountryRegion_CountryRegionCode Foreign key constraint referencing CountryRegion.CountryRegionCode.

### Linked from

	Table	Join	Title / Name / Description
+	Sales ( Listomer		FK_Customer_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.
+	Sales.SalesOrderHeader	Sales.SalesTerritory.TerritoryID = Sales.SalesOrderHeader.TerritoryID	FK_SalesOrderHeader_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.
+	Sales.SalesPerson	Sales.SalesTerritory.TerritoryID = Sales.SalesPerson.TerritoryID	FK_SalesPerson_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.
+	Sales.SalesTerritoryHistory	Sales.SalesTerritory.TerritoryID = Sales.SalesTerritoryHistory.TerritoryID	FK_SalesTerritoryHistory_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.
+	Person.StateProvince	Sales.SalesTerritory.TerritoryID = Person.StateProvince.TerritoryID	FK_StateProvince_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.

# Unique keys

	Columns	Name / Description
Ŷ	TerritoryID	PK_SalesTerritory_TerritoryID Primary key (clustered) constraint
9	Name	AK_SalesTerritory_Name Unique nonclustered index.
9	rowguid	AK_SalesTerritory_rowguid Unique nonclustered index. Used to support replication samples.

## Uses

	Name
■ Sales.SalesTerritory	

## Used by

Name Name
■ Sales.SalesTerritory
⊞ Person.StateProvince

Name
■ Sales.Customer
■ Sales.SalesPerson
■ Sales.SalesTerritoryHistory

## 9.1.15. Table: Sales.SalesTerritoryHistory

Sales representative transfers to other sales territories.

#### Columns

	Name	Data type	Ν	Description / Attributes
P	BusinessEntityID	int		Primary key. The sales rep. Foreign key to SalesPerson.BusinessEntityID.
Ŷ	TerritoryID	int		Primary key. Territory identification number. Foreign key to SalesTerritory.SalesTerritoryID.
P	StartDate	datetime		Primary key. Date the sales representive started work in the territory.
	EndDate	datetime	N	Date the sales representative left work in the territory.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table	Join	Title / Name / Description
<b>&gt;</b>	Sales.SalesPerson	Sales.SalesTerritoryHistory.BusinessEnti tyID = Sales.SalesPerson.BusinessEntityID	FK_SalesTerritoryHistory_SalesPerson_BusinessEntityID Foreign key constraint referencing SalesPerson.SalesPersonID.
<b>&gt;</b>	Sales.SalesTerritory	Sales.SalesTerritoryHistory.TerritoryID = Sales.SalesTerritory.TerritoryID	FK_SalesTerritoryHistory_SalesTerritory_TerritoryID Foreign key constraint referencing SalesTerritory.TerritoryID.

## Unique keys

	Columns		Name / Description
BusinessEntityID, StartDate, TerritoryID  PK_SalesTerritoryHistory_BusinessEntityID_StartDate_TerritoryID  Primary key (clustered) constraint			
	9	rowguid	AK_SalesTerritoryHistory_rowguid Unique nonclustered index. Used to support replication samples.

#### Uses

١	Name
■ Sales.SalesPerson	
■ Sales.SalesTerritory	

# 9.1.16. Table: Sales.ShoppingCartItem

Contains online customer orders until the order is submitted or cancelled.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ShoppingCartItemID	int		Primary key for ShoppingCartItem records. Identity / Auto increment column
	ShoppingCartID	nvarchar(50)		Shopping cart identification number.
	Quantity	int		Product quantity ordered. Default: 1
	ProductID	int		Product ordered. Foreign key to Product.ProductID.
	DateCreated	datetime		Date the time the record was created. Default: getdate()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Links to

	Table	Join	Title / Name / Description
>	Production.Product	Sales.ShoppingCartItem.ProductID = Production.Product.ProductID	FK_ShoppingCartItem_Product_ProductID Foreign key constraint referencing Product.ProductID.

## Unique keys

	Columns	Name / Description
P	Shopping CartItemID	PK_ShoppingCartItem_ShoppingCartItemID Primary key (clustered) constraint

#### Uses

Name
■ Sales.ShoppingCartItem
☐ Production.Product

# 9.1.17. Table: Sales.SpecialOffer

# Sale discounts lookup table.

	Name	Data type	Ν	Description / Attributes
Ŷ	SpecialOfferID	int		Primary key for SpecialOffer records. Identity / Auto increment column
	Description	nvarchar(255)		Discount description.
	DiscountPct	smallmoney		Discount precentage. Default: 0.00
	Туре	nvarchar(50)		Discount type category.
	Category	nvarchar(50)		Group the discount applies to such as Reseller or Customer.
	StartDate	datetime		Discount start date.
	EndDate	datetime		Discount end date.
	MinQty	int		Minimum discount percent allowed. Default: 0
	MaxQty	int	N	Maximum discount percent allowed.

Name	Data type	Ν	Description / Attributes
rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

## Linked from

	Table	Join	Title / Name / Description
+	Sales. Special Offer Product	Sales.SpecialOffer.SpecialOfferID = Sales.SpecialOfferProduct.SpecialOfferID	FK_SpecialOfferProduct_SpecialOffer_SpecialOfferID Foreign key constraint referencing SpecialOffer.SpecialOfferID.

# Unique keys

	Columns	Name / Description
9	SpecialOfferID	PK_SpecialOffer_SpecialOfferID Primary key (clustered) constraint
9	rowguid	AK_SpecialOffer_rowguid Unique nonclustered index. Used to support replication samples.

## Used by

	Name Name
Sales.	:.SpecialOffer
Ⅲ Sa	ales.Special Offer Product

## 9.1.18. Table: Sales.SpecialOfferProduct

Cross-reference table mapping products to special offer discounts.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	SpecialOfferID	int		Primary key for SpecialOfferProduct records.
Ŷ	ProductID	int		Product identification number. Foreign key to Product.ProductID.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

Table		Join	Title / Name / Description
<b>&gt;</b>	Production.Product	Sales.SpecialOfferProduct.ProductID = Production.Product.ProductID	FK_SpecialOfferProduct_ProductID Foreign key constraint referencing Product.ProductID.
<b>&gt;</b>	Sales.SpecialOffer	Sales.SpecialOfferProduct.SpecialOffer ID = Sales.SpecialOffer.SpecialOfferID	FK_SpecialOfferProduct_SpecialOffer_SpecialOfferID Foreign key constraint referencing SpecialOffer.SpecialOfferID.

#### Linked from

Table Join		Join	Title / Name / Description
~	Sales.Sales Order Detail	Sales.SpecialOfferProduct.SpecialOffer ID = Sales.SalesOrderDetail.SpecialOfferID, Sales.SpecialOfferProduct.ProductID = Sales.SalesOrderDetail.ProductID	FK_SalesOrderDetail_SpecialOfferProduct_SpecialOfferIDProductID Foreign key constraint referencing SpecialOfferProduct.SpecialOfferIDProductID.

# Unique keys

		Columns	Name / Description	
	PK_SpecialOfferProduct_SpecialOfferID_Product_Primary key (clustered) constraint		PK_SpecialOfferProduct_SpecialOfferID_ProductID Primary key (clustered) constraint	
	rowguid  AK_SpecialOfferProduct_rowguid  Unique nonclustered index. Used to support		AK_SpecialOfferProduct_rowguid Unique nonclustered index. Used to support replication samples.	

#### Uses

۸	Name
■ Sales.SpecialOfferProduct	
■ Sales.SpecialOffer	

# Used by

	Name	
=== Sales.Sp	ecialOfferProduct	
■ Sales	s. Sales Order Detail	

### 9.1.19. Table: Sales.Store

## Customers (resellers) of Adventure Works products.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	BusinessEntityID	int		Primary key. Foreign key to Customer.BusinessEntityID.
	Name	nvarchar(50)		Name of the store.
	SalesPersonID	int	N	ID of the sales person assigned to the customer. Foreign key to SalesPerson.BusinessEntityID.
	Demographics	xml	N	Demographic informationg about the store such as the number of employees, annual sales and store type.
	rowguid	uniqueidentifier		ROWGUIDCOL number uniquely identifying the record. Used to support a merge replication sample.  Default: newid()
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

#### Links to

	Table Join		Title / Name / Description	
>	■ I Person RusinessEntity		FK_Store_BusinessEntity_BusinessEntityID Foreign key constraint referencing BusinessEntity.BusinessEntityID	

Table		Join	Title / Name / Description
<b>&gt;</b>	Sales.SalesPerson	Sales.SalesPersonID = Sales.SalesPerson.BusinessEntityID	FK_Store_SalesPerson_SalesPersonID Foreign key constraint referencing SalesPerson.SalesPersonID

## Linked from

	Table	Join	Title / Name / Description
4	Sales.Customer	Sales.Store.BusinessEntityID = Sales.Customer.StoreID	FK_Customer_Store_StoreID Foreign key constraint referencing Store.BusinessEntityID.

## Unique keys

		Columns	Name / Description	
	?	BusinessEntityID	PK_Store_BusinessEntityID Primary key (clustered) constraint	
	rowguid  AK_Store_rowguid  Unique nonclustered index. Used to support		AK_Store_rowguid Unique nonclustered index. Used to support replication samples.	

#### Uses

	Name
■ Sales.Store	
■ Person.BusinessEntity	

## Used by

Name

## 9.2. Views

## 9.2.1. View: Sales.vIndividualCustomer

Individual customers (names and addresses) that purchase Adventure Works Cycles products online.

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Title	nvarchar(8)	N	
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
Suffix	nvarchar(10)	N	
PhoneNumber	nvarchar(25)	N	
PhoneNumberType	nvarchar(50)	N	
EmailAddress	nvarchar(50)	N	
EmailPromotion	int		
AddressType	nvarchar(50)		

Name	Data type	Ν	Description / Attributes
AddressLine1	nvarchar(60)		
AddressLine2	nvarchar(60)	N	
City	nvarchar(30)		
StateProvinceName	nvarchar(50)		
PostalCode	nvarchar(15)		
CountryRegionName	nvarchar(50)		
Demographics	xml	N	

## 9.2.2. View: Sales.vPersonDemographics

Displays the content from each element in the xml column Demographics for each customer in the Person.Person table.

#### Columns

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
TotalPurchaseYTD	money	N	
DateFirstPurchase	datetime	N	
BirthDate	datetime	N	
MaritalStatus	nvarchar(1)	N	
YearlyIncome	nvarchar(30)	N	
Gender	nvarchar(1)	N	
TotalChildren	int	N	
NumberChildrenAtHome	int	N	
Education	nvarchar(30)	N	
Occupation	nvarchar(30)	N	
HomeOwnerFlag	bit	N	
NumberCarsOwned	int	N	

## 9.2.3. View: Sales.vSalesPerson

Sales representiatives (names and addresses) and their sales-related information.

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Title	nvarchar(8)	N	
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
Suffix	nvarchar(10)	N	
JobTitle	nvarchar(50)		
PhoneNumber	nvarchar(25)	N	

Name	Data type	Ν	Description / Attributes
PhoneNumberType	nvarchar(50)	N	
EmailAddress	nvarchar(50)	N	
EmailPromotion	int		
AddressLine1	nvarchar(60)		
AddressLine2	nvarchar(60)	N	
City	nvarchar(30)		
StateProvinceName	nvarchar(50)		
PostalCode	nvarchar(15)		
CountryRegionName	nvarchar(50)		
TerritoryName	nvarchar(50)	N	
TerritoryGroup	nvarchar(50)	N	
SalesQuota	money	N	
SalesYTD	money		
SalesLastYear	money		

## 9.2.4. View: Sales.vSalesPersonSalesByFiscalYears

Uses PIVOT to return aggregated sales information for each sales representative.

#### Columns

Name	Data type	Ν	Description / Attributes
SalesPersonID	int	N	
FullName	nvarchar(152)	N	
JobTitle	nvarchar(50)		
SalesTerritory	nvarchar(50)		
2002	money	N	
2003	money	N	
2004	money	N	

## 9.2.5. View: Sales.vStoreWithAddresses

Stores (including store addresses) that sell Adventure Works Cycles products to consumers.

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Name	nvarchar(50)		
AddressType	nvarchar(50)		
AddressLine1	nvarchar(60)		
AddressLine2	nvarchar(60)	N	
City	nvarchar(30)		
StateProvinceName	nvarchar(50)		

Name	Data type	Ν	Description / Attributes
PostalCode	nvarchar(15)		
CountryRegionName	nvarchar(50)		

## 9.2.6. View: Sales.vStoreWithContacts

Stores (including store contacts) that sell Adventure Works Cycles products to consumers.

#### Columns

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Name	nvarchar(50)		
ContactType	nvarchar(50)		
Title	nvarchar(8)	N	
FirstName	nvarchar(50)		
MiddleName	nvarchar(50)	N	
LastName	nvarchar(50)		
Suffix	nvarchar(10)	N	
PhoneNumber	nvarchar(25)	N	
PhoneNumberType	nvarchar(50)	N	
EmailAddress	nvarchar(50)	N	
EmailPromotion	int		

## 9.2.7. View: Sales.vStoreWithDemographics

Stores (including demographics) that sell Adventure Works Cycles products to consumers.

Name	Data type	Ν	Description / Attributes
BusinessEntityID	int		
Name	nvarchar(50)		
AnnualSales	money	N	
AnnualRevenue	money	N	
BankName	nvarchar(50)	N	
BusinessType	nvarchar(5)	N	
YearOpened	int	N	
Specialty	nvarchar(50)	N	
SquareFeet	int	N	
Brands	nvarchar(30)	N	
Internet	nvarchar(30)	N	
NumberEmployees	int	N	

## 9.3. Functions

## 9.3.1. Function: dbo.ufnGetAccountingEndDate

Scalar function used in the uSalesOrderHeader trigger to set the starting account date.

#### Input/Output

	Name	Data type	Description
<b>-@</b> •	Returns	datetime	

## 9.3.2. Function: dbo.ufnGetAccountingStartDate

Scalar function used in the uSalesOrderHeader trigger to set the ending account date.

#### Input/Output

	Name	Data type	Description
<b>→@</b> →	Returns	datetime	

#### 9.3.3. Function: dbo.ufnGetSalesOrderStatusText

Scalar function returning the text representation of the Status column in the SalesOrderHeader table.

#### Input/Output

	Name	Data type	Description
<del>,</del> @	Returns	nvarchar(15)	
÷@	Status	tinyint	Input parameter for the scalar function ufnGetSalesOrderStatusText. Enter a valid integer.

## 9.3.4. Function: dbo.ufnLeadingZeros

Scalar function used by the Sales. Customer table to help set the account number.

#### Input/Output

	Name	Data type	Description
*@÷	Returns	varchar(8)	
→@	Value	int	Input parameter for the scalar function ufnLeadingZeros. Enter a valid integer.

## 10. Admin

#### 10.1. Tables

#### 10.1.1. Table: dbo.AWBuildVersion

Current version number of the AdventureWorks 2012 sample database.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	SystemInformationID	tinyint		Primary key for AWBuildVersion records. Identity / Auto increment column
	Database Version	nvarchar(25)		Version number of the database in 9.yy.mm.dd.00 format.
	VersionDate	datetime		Date and time the record was last updated.
	ModifiedDate	datetime		Date and time the record was last updated. Default: getdate()

### Unique keys

	Columns	Name / Description		
Ŷ	SystemInformationID	PK_AWBuildVersion_SystemInformationID Primary key (clustered) constraint		

#### 10.1.2. Table: dbo.DatabaseLog

Audit table tracking all DDL changes made to the AdventureWorks database. Data is captured by the database trigger ddlDatabaseTriggerLog.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	DatabaseLogID	int		Primary key for DatabaseLog records. Identity / Auto increment column
	PostTime	datetime		The date and time the DDL change occurred.
	DatabaseUser	nvarchar(128)		The user who implemented the DDL change.
	Event	nvarchar(128)		The type of DDL statement that was executed.
	Schema	nvarchar(128)	N	The schema to which the changed object belongs.
	Object	nvarchar(128)	N	The object that was changed by the DDL statment.
	TSQL	nvarchar(MAX)		The exact Transact-SQL statement that was executed.
	XmlEvent	xml		The raw XML data generated by database trigger.

#### Unique keys

Columns		Name / Description
P	DatabaseLogID	PK_DatabaseLog_DatabaseLogID Primary key (nonclustered) constraint

#### 10.1.3. Table: dbo.ErrorLog

Audit table tracking errors in the the AdventureWorks database that are caught by the CATCH block of a TRY...CATCH construct. Data is inserted by stored procedure dbo.uspLogError when it is executed from inside the CATCH block of a TRY...CATCH construct.

#### Columns

	Name	Data type	Ν	Description / Attributes
Ŷ	ErrorLogID	int		Primary key for ErrorLog records. Identity / Auto increment column
	ErrorTime	datetime		The date and time at which the error occurred. Default: getdate()
	UserName	nvarchar(128)		The user who executed the batch in which the error occurred.
	ErrorNumber	int		The error number of the error that occurred.
	ErrorSeverity	int	N	The severity of the error that occurred.
	ErrorState	int	N	The state number of the error that occurred.
	ErrorProcedure	nvarchar(126)	N	The name of the stored procedure or trigger where the error occurred.
	ErrorLine	int	N	The line number at which the error occurred.
	ErrorMessage	nvarchar(4000)		The message text of the error that occurred.

#### Unique keys

	Columns	Name / Description
P	ErrorLogID	PK_ErrorLog_ErrorLogID Primary key (clustered) constraint

## 10.2. Procedures

#### 10.2.1. Procedure: dbo.uspLogError

Logs error information in the ErrorLog table about the error that caused execution to jump to the CATCH block of a TRY...CATCH construct. Should be executed from within the scope of a CATCH block otherwise it will return without inserting error information.

#### Input/Output

- 1	·			
	Name	Data type	Description	
<b>@</b>	ErrorLogID	int	Output parameter for the stored procedure uspLogError. Contains the ErrorLogID value corresponding to the row inserted by uspLogError in the ErrorLog table.	

## 10.2.2. Procedure: dbo.uspPrintError

Prints error information about the error that caused execution to jump to the CATCH block of a TRY...CATCH construct. Should be executed from within the scope of a CATCH block otherwise it will return without printing any error information.