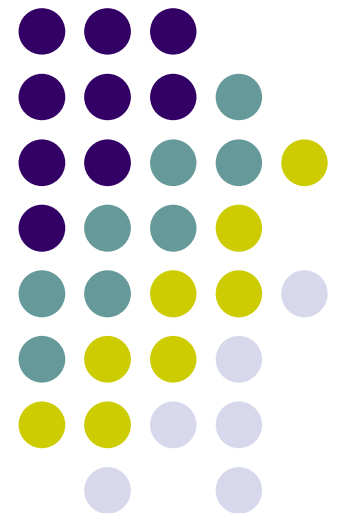


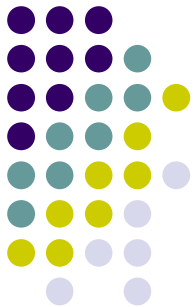
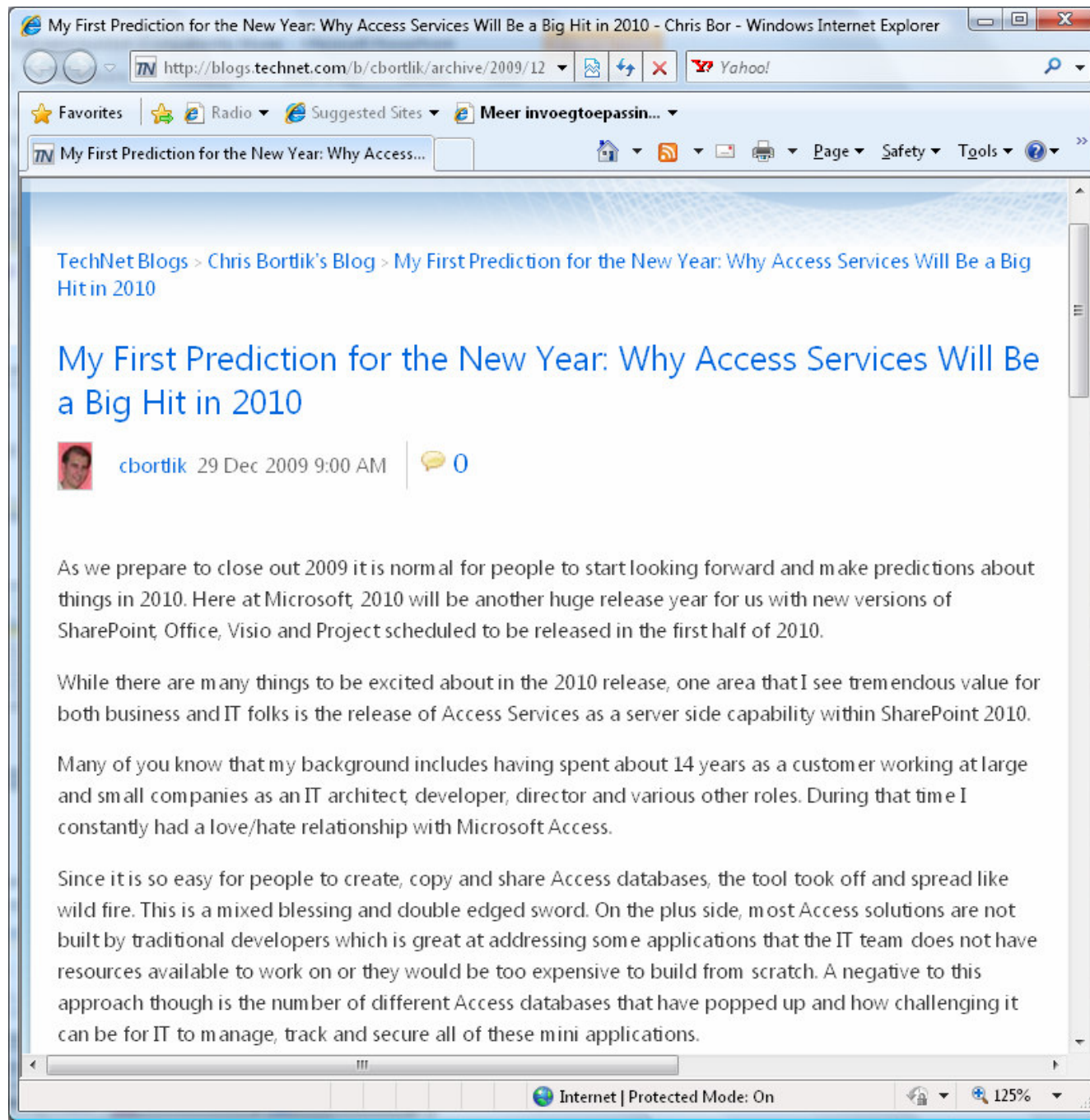
# Webdatenbanken mit Access 2010

Ynte Jan Kuindersma  
(Registered Microsoft Partner)

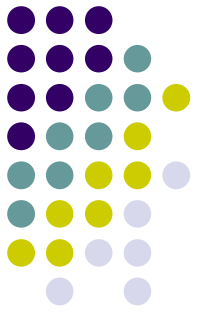
AEK 13

Nürnberg, 25. September  
Nürnberg, 2. Oktober 2010  
Hannover, 16. Oktober 2010



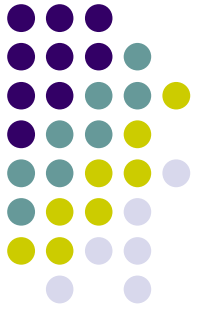


# Build an Access database to share on the Web



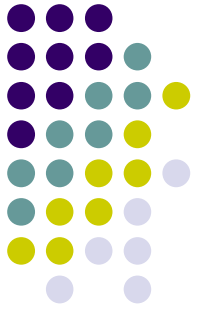
“You can use Access 2010 and Access Services, a new component of SharePoint, to build web database applications. This helps you:

- Secure and manage access to your data
- Share data throughout an organization, or over the Internet.
- Create database applications that don't require Access to use”
- <http://office2010.microsoft.com/en-us/access-help/build-an-access-database-to-share-on-the-web-HA010356866.aspx>



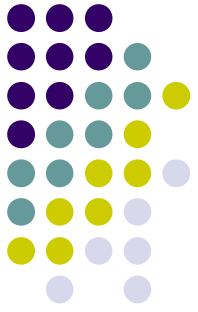
# Wieso soll das schön sein?

- “IT-Abteilung ist zufrieden(er)”
  - Backup, gesicherter Zugang, weniger Aufwand (kein SQL Server, keine Shortcuts). Access-Anwendungen sind wieder bei der IT-Abteilung untergebracht
- Webzugang wird wirklich leicht gemacht
  - Kein Access und SQL Server-Clientsoftware am Client, alles läuft über den Browser
- Anwendung wird tatsächlich hybrid, weil die “klassische” Access-Anwendung dabei nicht verloren geht : “Best of both worlds”



# Fahrplan

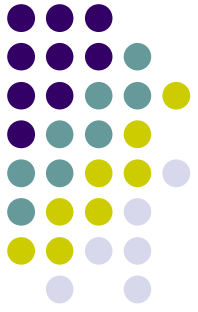
- Theorie und Hintergründe
- Northwind demo
- Umsetzung Access Anwendung
  - Tabellen, Abfragen, Formulare, Berichte, Makros
- Wie geht es weiter?



# Was ist es?

- Backend: Tabellen werden zu Sharepointlisten (Zukunft: auch SQLServer oder andere Datenquellen)
  - Automatisches Local Caching und Synchronisation
  - Sharepoint-Sicherheit (Active Directory), kein anonymer Zugang möglich? (Oder doch, aber dann read-only)
- Web Frontend
  - Anwendung wird Sharepoint Subsite
  - HTML Webforms mit in Javascript konvertierten Makros
  - Webabfragen werden in Workflows konvertiert
  - Berichte werden zu Reporting Services Berichten am Server
- Windows Frontend bleibt
  - Klassisches Access inklusive VBA
  - Frontend „residiert“ auch am Server und ist downloadbar und “offline” zu verwenden (nicht passwort-geschützt)

# Wie groß können die Anwendungen werden?



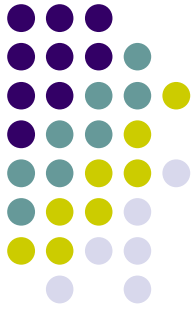
- “The Microsoft guideline is 20,000 rows, but we have found that even that number can be very slow performance. It think that in some cases Azure/.NET may be a better answer and Access Services better for “lightweight” applications.

....

Also include 20 tables per web database with moderate transaction volume as a suggested configuration.”

*Aus einer Mail von: Larry Strange, Accesshosting.com*





# Demo: Northwind

- Wie sieht sie im Web aus?

Home - NorthwindWebTraders - Windows Internet Explorer

http://birdautomation.accesshosting.com/NorthwindWebTraders/default.aspx#Type=Form&Name=DashboardInventoryToReorderDatasheet&Path=Main.NavigationS

File Edit View Favorites Tools Help

★ Favorites | ★ Suggested Sites | Web Slice Gallery

Home - NorthwindWebTraders

NorthwindWebTraders ▸ Options ▾

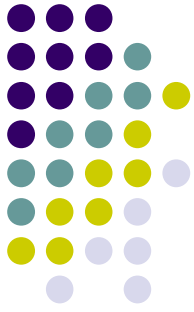
### Northwind Traders

Dashboard Products Orders Purchases Employees Report Center Getting Started

I am... Ynte jan Kuindersma ▾ New Customer Order New Purchase Order

#### Active Orders

	ID	Order Date	Status	Salesperson	Customer	Sub Total	Order Total
+	(New)	12-9-2010				\$ 0,00	



# Demo: Northwind

- Wie sieht die ACCDB aus?

NorthwindWebTraders : Access Services Database - Microsoft Access

**Form Tools**

File | Home | Create | External Data | Database Tools | Datasheet

Application Parts | Table | Query | Client Queries | Form | Multiple Items | Blank Form | Datasheet | Navigation | Report | Blank Report | Client Reports | Macro | Client Objects

**All Access Objects**

Search...

Tables | Queries | Forms | Reports

CustomerList | Invoice | Invoice\_ClientOnly | MonthlySales\_ClientOnly | OrdersActive | QuarterlySales\_ClientOnly | SupplierList | YearlySales\_ClientOnly

**Macros**

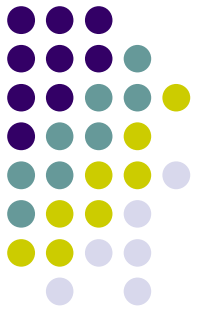
**Northwind Traders**

Dashboard | Products | Orders | Purchases | Employees | Report Center | Getting Started

New Product | Inventory Levels | Needs Restocking | Discontinued Products | Suppliers

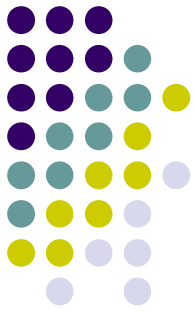
Product Code	Product Name	Category	Supplier	Standard Price
NWTB-1	Northwind Traders Chai	Pasta	Supplier D	\$12.00
NWTCO-3	Northwind Traders Syrup	Condiments	Supplier J	\$18.00
NWTCO-4	Northwind Traders Cajun Seasoning	Condiments	Supplier J	\$18.00
NWTO-5	Northwind Traders Olive Oil	Oils	Supplier J	\$18.00
NWTJP-6	Northwind Traders Boysenberry Spread	Jams & Preserves	Supplier B	\$18.00
NWTFN-7	Northwind Traders Dried Pears	Dried Fruit & Nuts	Supplier B	\$18.00
NWTS-8	Northwind Traders Curry Sauce	Sauces	Supplier H	\$18.00

# Konvertierung bestehender Anwendungen



- Web-Kompatibilitätsprüfung
  - Probleme und ihre Lösung
- Neue Felder werden automatisch hinzugefügt
  - \_oldid, insert- und changedatum
- Webformulare und Webberichte müssen neu erstellt werden
- Es gibt schon Dienstleister...

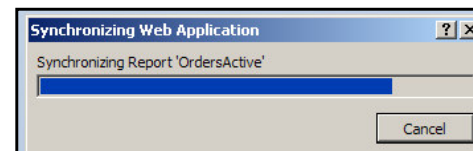
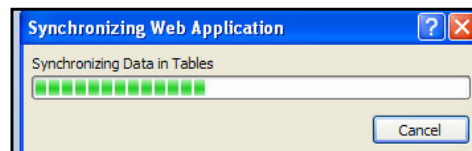
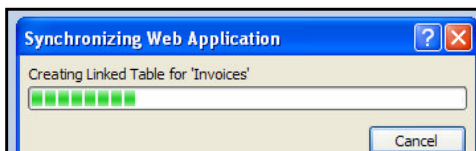
# Publishing to Sharepoint



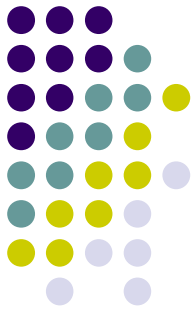
The screenshot shows the 'Save & Publish' ribbon tab in Microsoft Access. The left sidebar contains options: Save, Save Object As, Save Database As, Open, Close Database, a list of recent databases (Northwind.accdb, NorthWindWebTra..., todo on birdautom..., Northwind\_2003\_to...), Info, Recent, New, Print, Save & Publish (highlighted), Help, and Options.

The main area is divided into three sections:

- File Types:** Includes 'Save Database As' and 'Save Object As' buttons.
- Publish:** Features a large yellow 'Publish to Access Services' button.
- Access Services Overview:** Contains text about sharing databases, a list of use cases (Web browser, SharePoint, Round trip queries), and a link to a video demo.
- Check Web Compatibility:** Includes a 'Run Compatibility Checker' button and a 'Web Compatibility Issues' button.
- Publish to Access Services:** Displays fields for 'Full URL', 'Server URL', and 'Site Name', along with a 'Recent Locations' list showing 'birdautomation.accesshosting.com'.



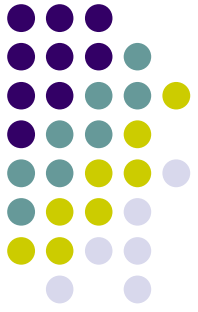
# Demo: Web-Kompatibilitätsprüfung



- Northwind 2003 (27 Fehler, 2010 nur 94)

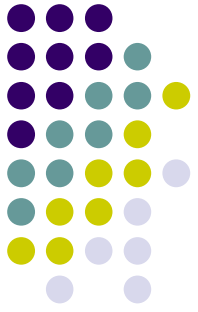
ID	Element	Element Name	Control Type	Control Name	Property Name	Issue	Issue Type ID	Description
1	Table	Categories	TableColumn	Picture		Error	<a href="#">ACCWeb107000</a>	Column data type is incompatible with the Web.
2	Table	Customers	Table	Customers		Error	<a href="#">ACCWeb107014</a>	A Table should have a Primary Key and it should be a number with field size 'long'
3	Table	Employees	TableColumn	BirthDate	Format	Error	<a href="#">ACCWeb107013</a>	Property value is incompatible with the Web.
4	Table	Employees	TableColumn	HireDate	Format	Error	<a href="#">ACCWeb107013</a>	Property value is incompatible with the Web.
5	Table	Employees	TableColumn	ReportsTo	Row Source	Error	<a href="#">ACCWeb105006</a>	SQL statements containing calculated result columns for lookup row sources are in
6	Table	Order Details	TableColumn	UnitPrice	Format	Error	<a href="#">ACCWeb107008</a>	Custom formats are incompatible with the Web.
7	Table	Order Details	TableColumn	Discount	Validation Rule	Error	<a href="#">ACCWeb101002</a>	Expression not supported for conversion Expression: Between 0 And 1
8	Table	Order Details	Indexes	PrimaryKey		Error	<a href="#">ACCWeb107001</a>	Composite indexes are incompatible with the Web.
9	Table	Order Details	Table	Order Details		Error	<a href="#">ACCWeb107014</a>	A Table should have a Primary Key and it should be a number with field size 'long'
10	Table	Orders	TableColumn	OrderDate	Format	Error	<a href="#">ACCWeb107013</a>	Property value is incompatible with the Web.
11	Table	Orders	TableColumn	RequiredDate	Format	Error	<a href="#">ACCWeb107013</a>	Property value is incompatible with the Web.
12	Table	Orders	TableColumn	ShippedDate	Format	Error	<a href="#">ACCWeb107013</a>	Property value is incompatible with the Web.
13	Table	Orders	TableColumn	Freight	Format	Error	<a href="#">ACCWeb107008</a>	Custom formats are incompatible with the Web.
14	Table	Orders	TableColumn	CustomerID	Data Type	Error	<a href="#">ACCWeb102007</a>	Property value is incompatible with the Web.
15	Table	Orders	TableColumn	CustomerID	Row Source	Error	<a href="#">ACCWeb102008</a>	Table 'Orders' depends on Table 'Customers' which is incompatible with the Web.
16	Table	Orders	TableColumn	CustomerID	Row Source	Error	<a href="#">ACCWeb105002</a>	Lookup row sources must be complete SQL statements that specify one table and
17	Table	Orders	TableColumn	EmployeeID	Row Source	Error	<a href="#">ACCWeb102008</a>	Table 'Orders' depends on Table 'Employees' which is incompatible with the Web
18	Table	Orders	TableColumn	EmployeeID	Row Source	Error	<a href="#">ACCWeb105002</a>	Lookup row sources must be complete SQL statements that specify one table and
19	Table	Products	TableColumn	UnitPrice	Format	Error	<a href="#">ACCWeb107008</a>	Custom formats are incompatible with the Web.
20	Table	Products	TableColumn	CategoryID	Row Source	Error	<a href="#">ACCWeb102008</a>	Table 'Products' depends on Table 'Categories' which is incompatible with the We
21	Table	Products	TableColumn	CategoryID	Row Source	Error	<a href="#">ACCWeb105002</a>	Lookup row sources must be complete SQL statements that specify one table and

# DEMO: Publishing to Sharepoint



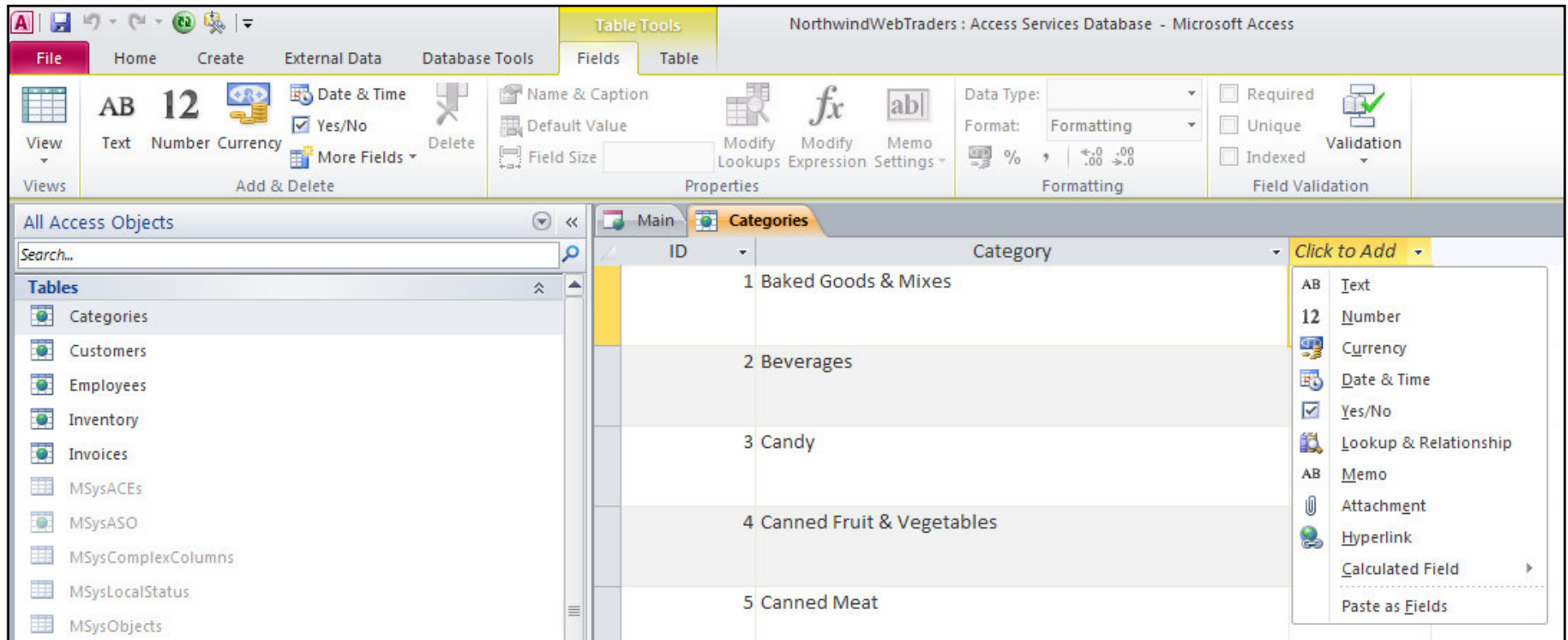
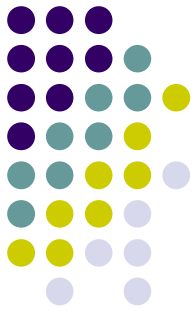


# Tabellen als Sharepointlisten: Was geht und was geht nicht?

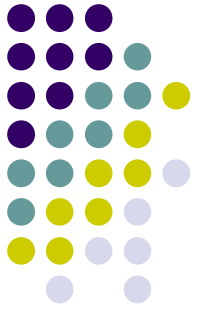


- Referentielle Integrität durch Lookupverhältnis zwischen Tabellen
- Weniger Feldtypen, z.B. kein OLE
  - Text, Zahl, Währung, Ja/Nein, Datum/Zeit, Berechnetes Feld, Anlage (eines pro Liste), Hyperlink, Memo, Nachschlagefeld
- Schlüssel ist immer Autowert (Long Integer)
- Keine Mehrfeldschlüssel (Composite keys)
- Keine Entwurfsansicht
- Mehr verbotene Zeichen in Feldnamen (^%{ })

# Sharepointlisten in der Praxis

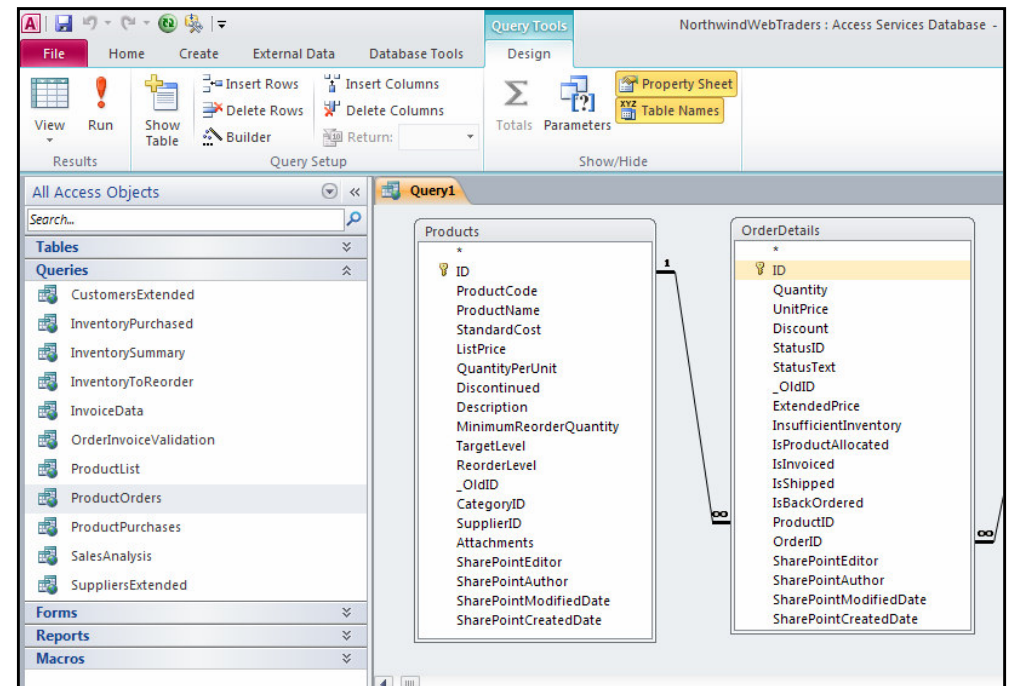


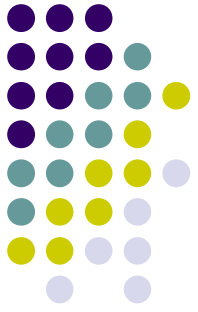




# Arbeiten mit Webabfragen

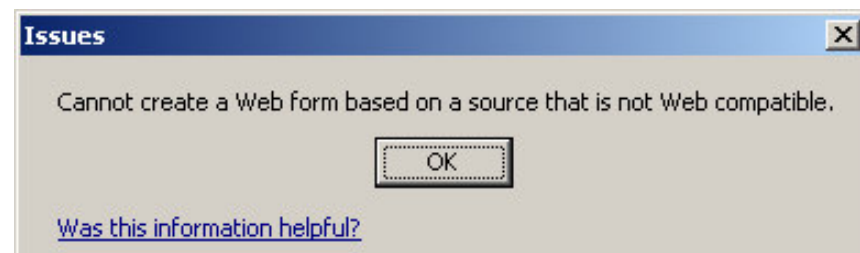
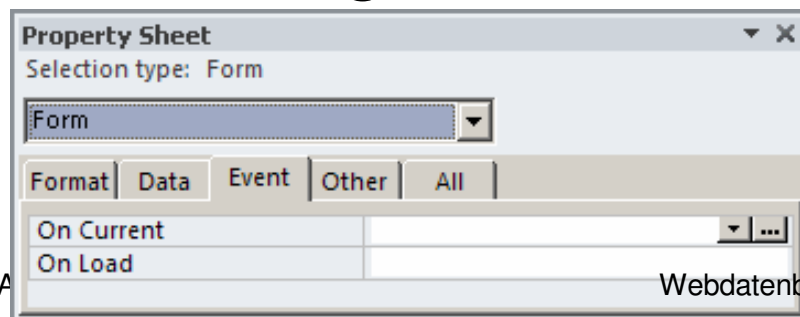
- Werden zu Workflows am Server
- Webformulare und Webberichte funktionieren nur mit Webabfragen
- Kein SQL
- Keine Aktionsabfragen
- Keine “Totals”
- Keine Unterabfragen
- Keine Union
- Keine Kreuztabellen

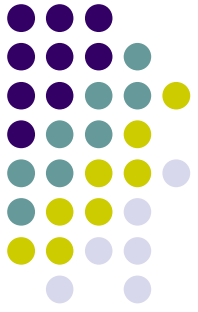




# Arbeiten mit Webformularen I

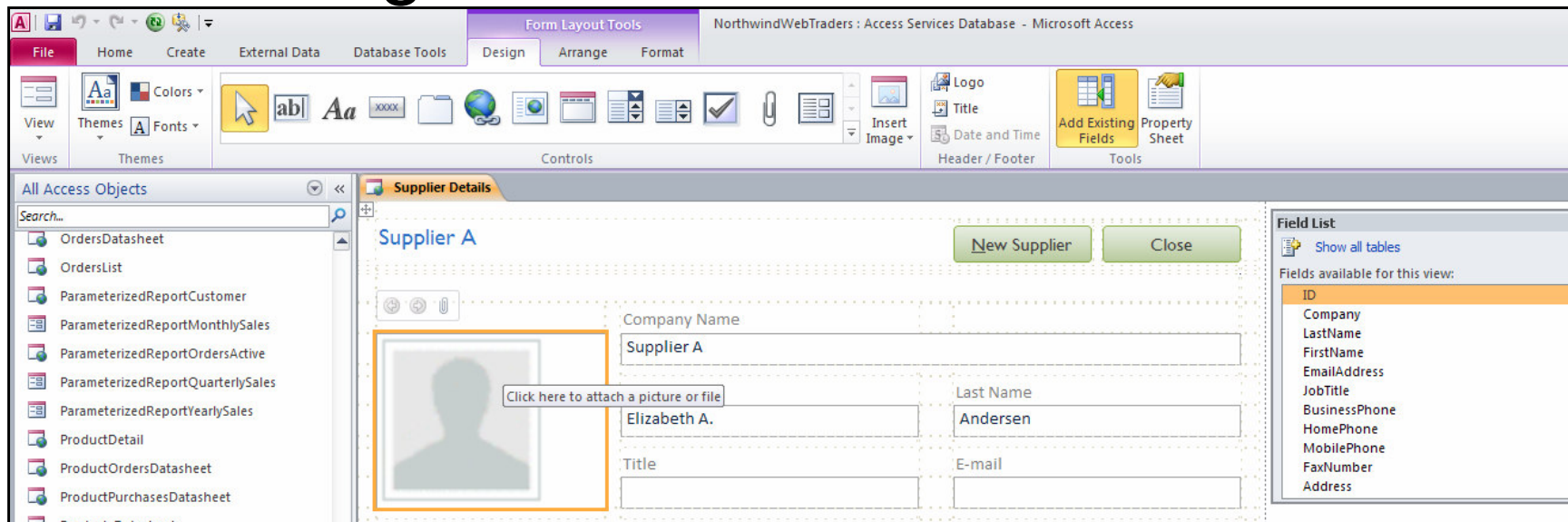
- 4 Formulararten (Einzeln, Endlos, Datenblatt und Navigation)
- Nur Makros, Kein VBA, Kein Active-X, keine Optionschaltfläche/Optionsgruppe, keine Bedingte Formatierung, weniger Ereignisse
- Funktionieren auch am Client; aber richtig testen geht nur am Server!

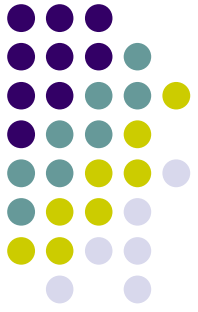




# Arbeiten mit Webformulare II

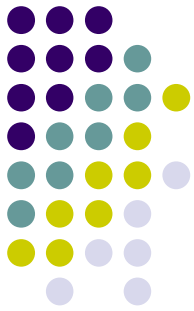
- Weniger Controls (12) als am Client (22)
- Keine Entwurfsansicht, nur Layoutansicht
- Nur mit “Layout Control” (Tabelle), keine freie Anordnung der Controls





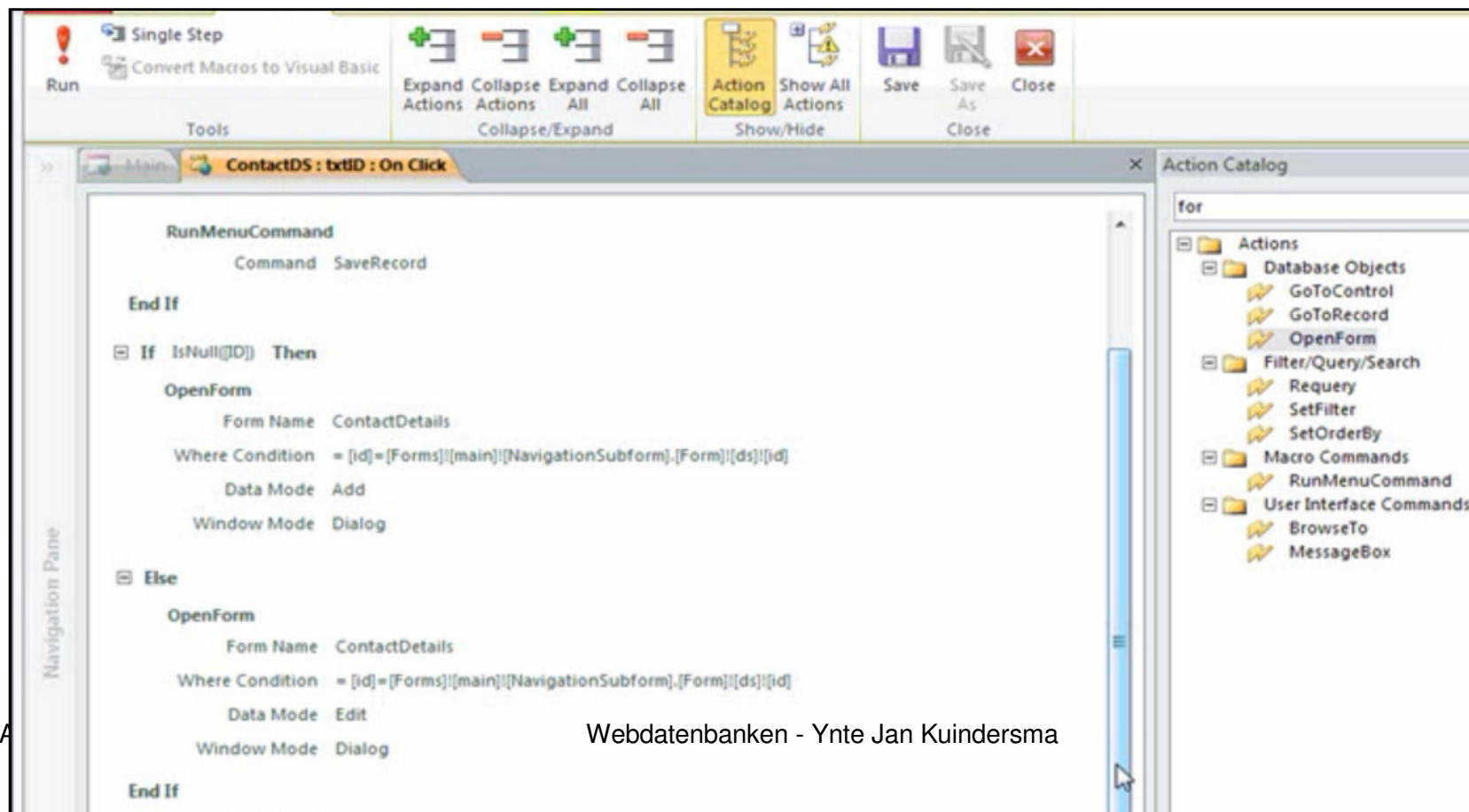
# Makro - Möglichkeiten

- Datenverarbeitung
  - Create, Read, Update, Delete
- Schleifen, IF THEN
- Funktionen
  - Currentwebuser, IsCurrentUserInGroup, isinsert, isnull, updated, IsClient & IsServer
- Variablen
  - Lokale, Return, Temp
- Parameter
- Fehlerbehandlung und Logging
- Intellisense

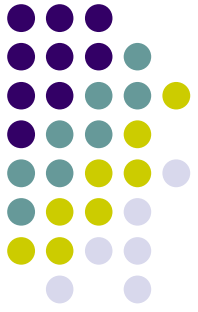


# Makros: Benutzeroberfläche I

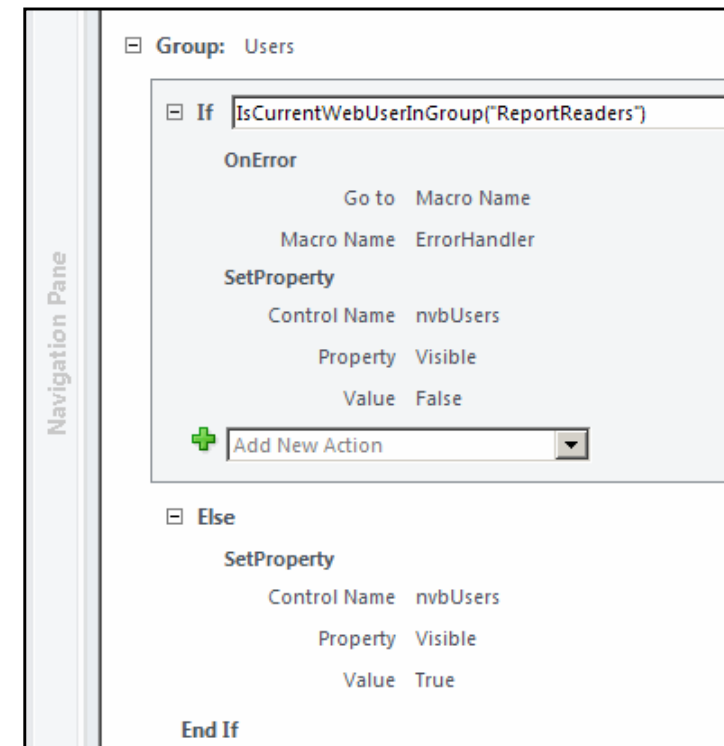
- Werden am Server zu Javascript
- Beispiel: Add oder Edit-Modus

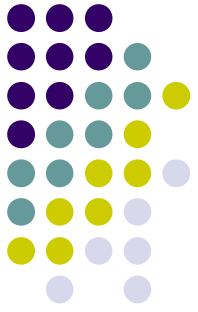


# Makros: Benutzeroberfläche II



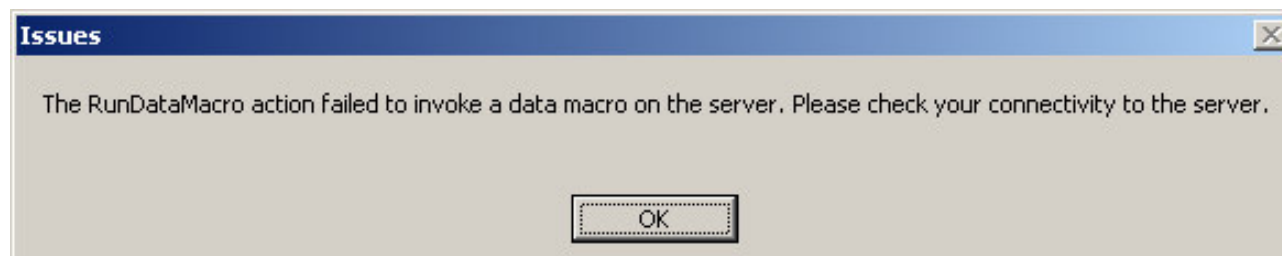
- Beispiel: Sichtbarkeit einer Navigationsseite abhängig von der Mitgliedschaft in einer Sharepoint-Benutzer-Gruppe

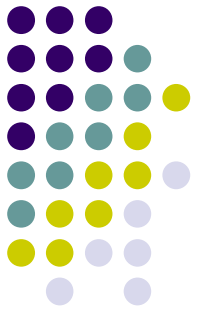




# Makros: Daten I

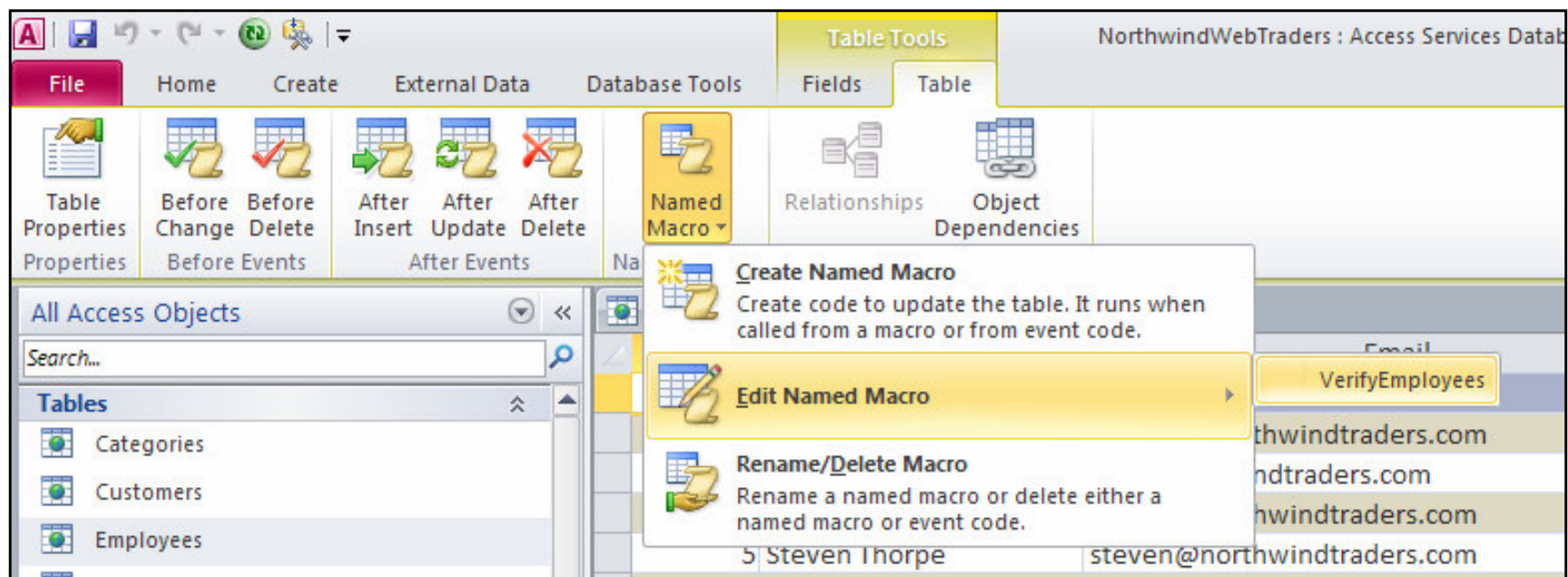
- Funktionieren wie Trigger am SQL Server
- Ersetzen Sum, Average usw.
- In einer Tabelle funktionieren sie immer; um sie selber abzurufen, muss man „connected“ sein.



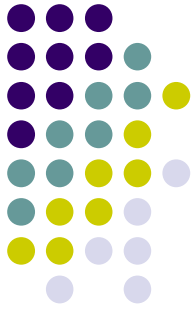


# Makros: Daten II

- Ereignisse: BeforeUpdate, AfterInsert usw.
- Benannte Makros (Named Macros)
  - Kann man als Entwickler auch selbst abrufen







# Makros: Daten III

- Beispiel: Employees.VerifyEmployees

Navigation Pane

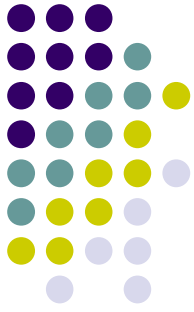
Customers Employees Employees : VerifyEmployees :

Parameters	Name	Description
	prmEmployeeEmail	Description
	prmEmployeeName	Description
	prmEmployeeLogin	Description

```
SetLocalVar (varInsertEmployee; True)
SetReturnVar (retEmployeeID_Verified; Null)

Look Up A Record In Employees
  Where Condition = [Email]=[prmEmployeeEmail] And IsNull([Email])=False Or [Login]=[prmEmployeeLogin]
  Alias
  SetLocalVar
    Name varInsertEmployee
    Expression = False
  SetReturnVar (retEmployeeID_Verified; [ID])

If [varInsertEmployee] Then
  Create a Record In Employees
    Alias
    SetField ([Email]; [prmEmployeeEmail])
    SetField ([FullName]; [prmEmployeeName])
    SetField ([Login]; [prmEmployeeLogin])
    SetReturnVar (retEmployeeID_Verified; [LastCreateRecordIdentity])
End If
```



# Makros: Daten IV

- Beispiel: Products.BeforeDelete

SetLocalVar

Name

varProductID

Expression

= [ID]

Look Up A Record In

SELECT OrderDetails.ProductID FROM OrderDetails;

Where Condition

= [ProductID]=[varProductID]

Alias

RaiseError

(1; ="Cannot delete product with order history. Consider discontinuing the product.")

Look Up A Record In

SELECT PurchaseOrderDetails.ProductID FROM PurchaseOrderDetails;

Where Condition

= [ProductID]=[varProductID]

Alias

RaiseError

Error Number

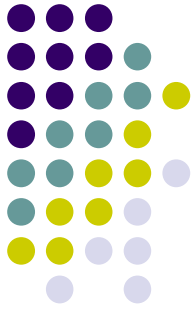
2

Error Description

= "Cannot delete product with purchase order history. Consider discontinuing the product."

+

Add New Action



# Makros: Daten V - A

- Beispiel: Customers.GetShippingAddress

Customers : GetShippingAddress :

Parameters	Name	Description
	prmCustomerID	Description

Create Pa

```
/* ----- */
/* Initialize ReturnVars */
/* ----- */
SetReturnVar (retName; "")
SetReturnVar (retAddress; "")
SetReturnVar (retCity; "")
SetReturnVar (retStateProvince; "")
SetReturnVar (retZipPostal; "")
SetReturnVar (retCountryRegion; "")
/* ----- */
/* Try and locate specified customer data */
/* ----- */
```

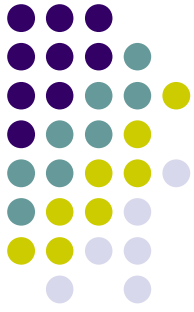
Look Up A Record In

Where Condition =

Alias

Update Parameters

```
SetReturnVar (retName; [Company])
SetReturnVar (retAddress; [Address])
SetReturnVar (retCity; [City])
SetReturnVar (retStateProvince; [StateProvince])
SetReturnVar (retZipPostal; [ZIPPostal])
SetReturnVar (retCountryRegion; [CountryRegion])
```



# Makros: Daten V - B

- Wie verwendet man Customers.GetShippingAddress?

```
OrderDetail : cboCustomerID : After Update

OnError (Macro Name; ErrorHandler)

If IsNull([cboCustomerID]) Then

    ClearShippingAddress

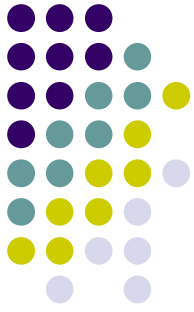
    SetProperty (txtShipName; Value; = "")
    SetProperty (txtShipAddress; Value; = "")
    SetProperty (txtShipCity; Value; = "")
    SetProperty (txtShipStateProvince; Value; = "")
    SetProperty (txtShipCountryRegion; Value; = "")
    SetProperty (txtShipZIPPostal; Value; = "")

Else

    SetDefaultShippingAddress

    RunDataMacro (Customers.GetShippingAddress; [cboCustomerID])
    SetProperty (txtShipName; Value; =[ReturnVars]![retName])
    SetProperty (txtShipAddress; Value; =[ReturnVars]![retAddress])
    SetProperty (txtShipCity; Value; =[ReturnVars]![retCity])
    SetProperty (txtShipStateProvince; Value; =[ReturnVars]![retStateProvince])
    SetProperty (txtShipZIPPostal; Value; =[ReturnVars]![retZipPostal])
    SetProperty (txtShipCountryRegion; Value; =[ReturnVars]![retCountryRegion])

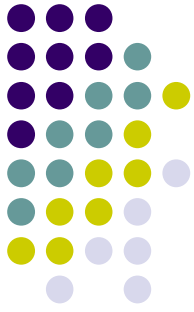
End If
```



# Makros: Daten V - C

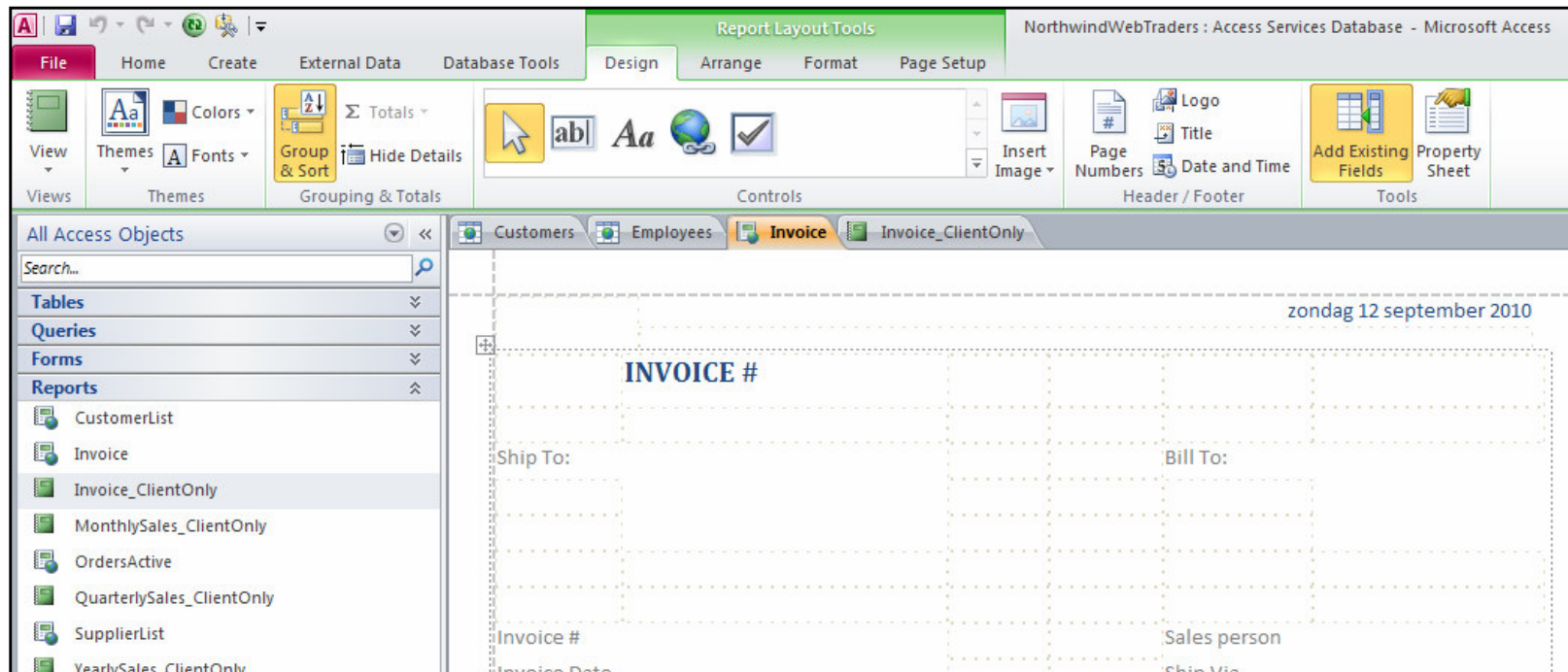
- Durchschnitt berechnen

```
SetReturnVar
    Name Durchschnitt
    Expression = 0
SetLocalVar
    Name Summe
    Expression = 0
SetLocalVar
    Name Zahl
    Expression = 0
For Each Record In Products
    Where Condition
        Alias
        SetLocalVar
            Name Summe
            Expression = [Summe]+[Products].[ListPrice]
        SetLocalVar
            Name Zahl
            Expression = [Zahl]+1
    SetReturnVar
        Name Durchschnitt
        Expression = [summe]/[zahl]
```

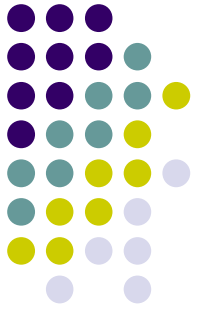


# Berichte (Reporting Services)

- Weniger Steuerelemente (4)
- Keine Entwurfsansicht, Keine Unterberichte, Keine Ereignisse



# Interaktivität: Bericht mit Parametern I



- Hauptformular (Main) in Northwind enthält ein Navigationcontrol (NavigationSubform)
- In einem eigenen Formular (ParameterizedReportOrdersActive) befinden sich ein SubreportControl (srpReport) und 2 Textfelder

Home - NorthwindWebTraders - Windows Internet Explorer

http://birdautomation.accesshosting.com/NorthwindWebTraders/default.aspx#Type=Report&Name=OrdersActive&Path=Main.NavigationSubform%3EReportCenter.sfrReportPage%3EParameterizedReportOrdersActive

File Edit View Favorites Tools Help

Home - NorthwindWebTraders

NorthwindWebTraders Options

Northwind Traders

Dashboard Products Orders Purchases Employees Report Center Getting Started

Open in New Tab

Start Date 13-8-2010 End Date 12-9-2010

zondag 12 september 2010

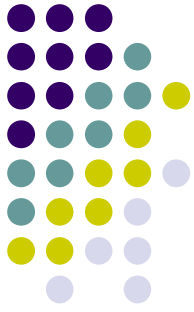
Active Orders

ID	Order Date	Status	Salesperson	Company	Order SubTotal
----	------------	--------	-------------	---------	----------------

Select a Report

- [Customer List](#)
- [Active Orders](#)
- [Supplier List](#)

# Interaktivität: Bericht mit Parametern II



- Textfeld-Ereignis “AfterUpdate” wird zum Filtern verwendet
- Verwendete Makrofunktionen: TempVars und BrowseTo

ParameterizedReportOrdersActive

Start Date: 13-8-2010 End Date: 12-9-2010

**Active Orders**

ID	Order Date	Status	Salesperson	Com
----	------------	--------	-------------	-----

Property Sheet  
Selection type: Text Box  
txtStartDate

Format Data Event Other All

On Click  
After Update: [Embedded Macro]  
On Dbl Click

ParameterizedReportOrdersActive : txtStartDate : After Update

**SetTempVar**

Name: tmpStartDate  
Expression: =[txtStartDate]

**SetTempVar**

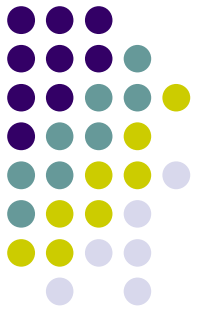
Name: tmpEndDate  
Expression: =[txtEndDate]

**BrowseTo**

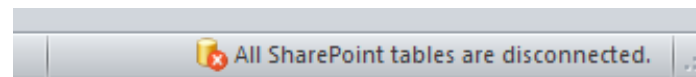
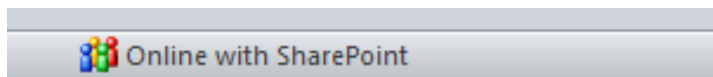
Object Type: Report  
Object Name: =[TempVars]![tmpReport]  
Path to Subform Control: Main.NavigationSubform>ReportCenter.sfrReportPage>ParameterizedReportOrdersActive.srpReport  
Where Condition: =[OrderDate]>[TempVars]![tmpStartDate]-1 And [OrderDate]<[TempVars]![tmpEndDate]+1  
Page:   
Data Mode: Edit



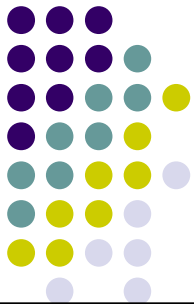
# Synchronisierung Client-Server



- Ohne Internet? Accdb öffnet automatisch in “Disconnected mode”
- Daten aus einmal geöffnete Tabellen auch in Local Cache („touched“), andere nicht
- Offline kann Accdb ohne Passwort geöffnet werden
- Alle 30 Sekunden wird Verbindung überprüft



# Synchronisierung in der Praxis



Sync Application

Sync Succeeded with Object Conflicts

Conflicting objects have been renamed.

Type	Name	Changed by	Renamed
Form	Main	AH\cursist1	Main_cursist1

Main

Main\_cursist1

File Home Create External Data Database Tools

Save Save Object As Save Database As Open Close Web Application

Information about todo on birdautomation.accesshosting

<http://birdautomation.accesshosting.com/todo>

Send and receive changes with the server

Attempt to sync with the server and reconnect all tables

- Changes have not been sent to the server.
- There are no changes to download from the server.

Access this database on the Web

<http://birdautomation.accesshosting.com/todo>

Sync Status last checked: 9/12/2010, 10:03:40 AM

Check Sync Status

File Home Create External Data Database Tools

View Paste Cut Copy Format Painter Filter Ascending Descending Remove Sort Toggle Filter Refresh All New Save Delete Records Find Replace Go To Select Text Formatting

Reconnected to SharePoint server The connection to one or more SharePoint servers has been restored. Click Synchronize to close opened objects, send pending changes to the server, and synchronize with server data. Synchronize

All Access Objects

Search...

Tables

- Move to SharePoint Site Issues
- MSysACEs
- MSysComplexColumns
- MSysLocalStatus
- MSysObjects
- MSysQueries
- MSysRelationships
- Comments
- Issues
- MSysASO
- RelatedIssues
- Users
- USysApplicationLog

Queries

Resolve Conflicts

Details - 1 of 1

Rows you changed were previously changed by Developer Testing 1 on 9/6/2010 05:59 PM. Your changes conflict with that user's changes.

For each conflict, discard your changes and keep the other user's changes or retry your changes.

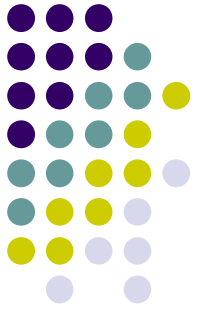
	Summary	Status	Priority	SharePointEditor	SharePointAuthor	SharePointModifiedDate	SharePointCreatedDate	Ca
Other user's changes	AEK	2	1 - Critical	Developer Testing 1	AH\cursist1	9/6/2010 17:59	6/9/2010 18:12	2 - C
Your changes	AEK x	2	1 - Critical		AH\cursist1		6/9/2010 12:12	2 - C

Discard My Changes Retry My Changes

If you have multiple conflicts or errors, you can also retry or discard all your changes.

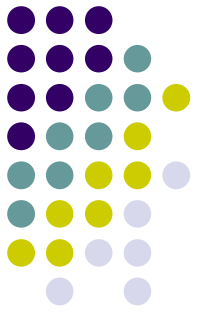
Discard All My Changes Retry All My Changes

# Provider-Situation für das Internet



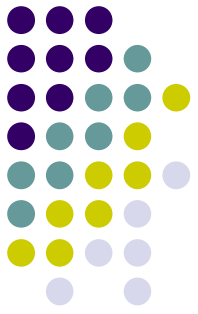
- Bisher noch zu wenige Provider
  - AccessHosting
  - FP web
- Sharepoint-Provider haben meist noch Sharepoint 2007
- Umstellung auf 2010 in nächster Zeit zu erwarten
  - MS als Provider von Sharepoint Live wird 2. Hälfte 2010 auf 2010 umsteigen

# Was hat MS in Version 1.0 erreicht I?



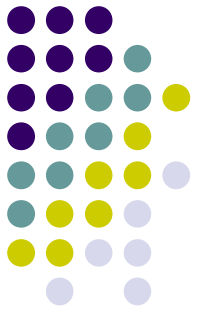
- Sharepoint wurde für die Access Services umfangreich erweitert
- Beziehungen und RI am Sharepoint-Server
- Gültigkeitsregeln am Server
- Völlig neue Query Engine am Server
- Völlig neue Form Rendering Engine um Formulare im Web Browser möglichst Client-getreu bringen zu können
- Übersetzung der Access Berichte für den Web Browser

# Was hat MS in Version 1.0 erreicht II?

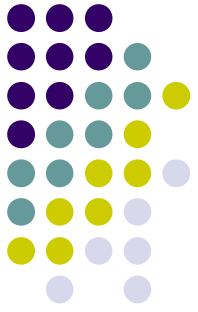


- Neue Makro Engine zur Automatisierung der Anwendung im Browser
- Neue Data Layer Makro Engine (Data Macros) für Geschäftslogik in der Datenschicht
- Komplett neuer Access Data Service um Daten so schnell wie möglich in und aus Sharepoint-Listen zu schaufeln
- Komplett neue Abläufe für das Veröffentlichen und Synchronisieren mit dem Access Client

# Was kann man in der nächsten Version erwarten/erhoffen?

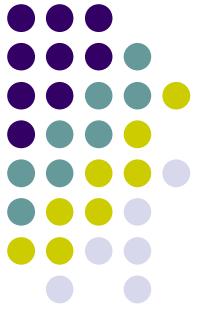


- Mehr Entwurfsansichten und Designmöglichkeiten
- Mehr Programmiermöglichkeiten, Ereignisse etc.
- Mehr Datensätze und bessere Performance?
- SQL Server-Tabellen als direktes Backend?
- Insgesamt wird es Access-ähnlicher werden, was die Möglichkeiten betrifft
- Für MS ist Sharepoint ein sehr wichtiges Produkt, in das viel investiert wird, daher weiterer Ausbau der Access Services wahrscheinlich
- MS ist selber noch am Planen, Details daher schwer vorherzusagen



# Resümee

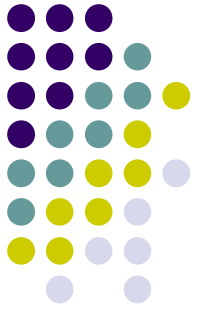
- Wenn Sie Ihre Tabellen in Sharepoint-Listen unterbringen, können Sie
  - Client Anwendungen erstellen, wie Sie es gewohnt sind
  - dazu aber auch eine Webanwendung anbieten...
- Vieles ist bereits möglich, aber es ist erst der Anfang.
- Vielleicht einfach mal ausprobieren...



# Hyperlinks I

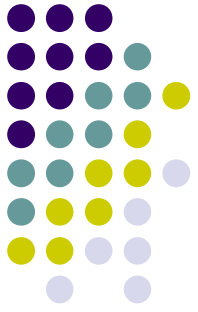
- Einführung Webdatenbanken mit Access 2010: <http://office2010.microsoft.com/en-us/access-help/build-an-access-database-to-share-on-the-web-HA010356866.aspx>
- Rechte in Sharepoint: <http://office.microsoft.com/en-us/sharepoint-foundation-help/roadmap-grant-permissions-for-a-site-HA101794118.aspx>





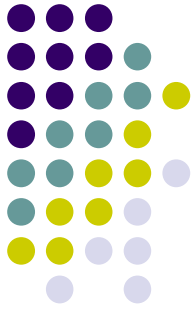
# Hyperlinks II

- Hosting
  - Microsoft Online
    - <http://www.microsoft.com/online/de-de/prodSharepoint.aspx>
    - <http://www.accesshosting.com/>
      - 30 Tage Free Trial
    - [www.fpweb.net/sharepoint-hosting/2010](http://www.fpweb.net/sharepoint-hosting/2010)
  - Konvertierung
    - <http://www.access2010converter.com/>



# Hyperlinks III

- <http://blogs.technet.com/b/cbortlik/archive/2009/12/29/my-first-prediction-for-the-new-year-why-access-services-will-be-a-big-hit-in-2010.aspx>
- Northwind Webdatenbank (webkompatibel)  
<http://office.microsoft.com/en-us/templates/CT010375241.aspx#ai:TC101114818>
- Einführung Makros  
<http://channel9.msdn.com/shows/Access/Tutorials-Access-2010-Macro-Designer>



# Demo Makro 1 Hannover

tbIPayments    tblDebts    **tbIPayments : DataMacro1 :**

Parameters	
Name	Description
intDebtnumber	Description

Parameters

SetReturnVar (Durchschnitt; 0)  
SetLocalVar (Summe; 0)  
SetLocalVar (Zahl; 0)

For Each Record In **tbIPayments**

Where Condition = [tbIPayments].[debtnumber]=[intDebtnumber]

Alias

SetLocalVar

Name	Summe
Expression	= [summe]+[tbIPayments].[amount]

SetLocalVar (Zahl; [zahl]+1)

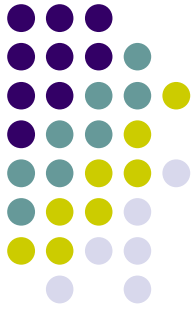
SetReturnVar

Name	Durchschnitt
Expression	= [summe]/[zahl]

SetReturnVar

Name	Summe
Expression	= [summe]

# Demo Makro 2 Hannover



tbIPayments   tbIDebts   **tbIDebts : DataMacro1 :**

Parameters	
Name	Description
intDebtnumber	Description
dbIPayment	Description

**For Each Record In**   **tbIDebts**

Where Condition   = [dwangbevelnummer]=[intDebtnumber]

Alias

**EditRecord**

Alias

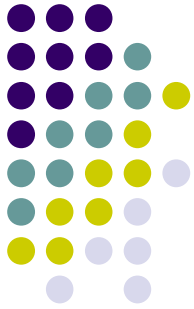
SetField

Name	tbIDebts.OpenAmount
Value	= [tbIDebts].[Total]-[dbIPayment]

**End EditRecord**

+ Add New Action

# Demo Makro 3 Hannover



tbIPayments   tbIDebts   frmPayments   **frmPayments : Command21 : On Click**

---

**RunMenuCommand**

Command   SaveRecord

**RunDataMacro**

Macro Name   tbIPayments.DataMacro1

**Parameters**

---

intDebtnumber   = [debtnumber]

**SetProperty**

Control Name   txtpayed

Property   Value

Value   =[ReturnVars]![Summe]

**RunDataMacro**


Macro Name   tbIDebts.DataMacro1

**Parameters**

---

intDebtnumber   = [debtnumber]

dbIPayment   = [ReturnVars]![Summe]

 Add New Action