Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

AJLenarz 11th April 2001 11:56 AM

Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

I have only recently got my feet wet in Microsoft Access. I am blown away with its capabilities and relatively user-friendly abilities. I am looking at possibly creating a APQP type d-base (process flow, fmea, control plan, etc...).

Does anybody else have something similar out there that I could look at and get some ideas? Any assistance would be appreciated.

Thanks.

Marc 15th April 2001 04:29 AM

I haven't personally seen anything that complex done in Access but I don't get out much. There is a lot you can do though. How about it folks - anyone seen anything this complex in Access?

Al Dyer 15th April 2001 09:42 AM

I've never used, or tried to design, an access database for the entire APQP process although I previously designed and used one for specifically for the PPAP end of APQP.

We now use a canned program for the entire APQP process that is somewhat flexible in allowing us to redefine fields and checklists.

Access is good, but it does have its limitations.

ASD...

wes wiszniewski 13th April 2005 06:25 PM
**Fmea and Control plans**

Integrating Fmea and Control plans into Access application is a great idea. I would also like to see adding process map if possible and make part numbers specific. There was software by Software Realities named Sorge Quality System which integrated all these and lot more but is not available anymore.

---

**Howard Atkins**  
14th April 2005 12:53 AM

There is a packaged software that uses does all this on an Access framework.  
They give you a runtime version  
We have had discussions in the past about PPAP and APQP software

Search for software in the PPAP/APQP forum to see discussions on commercial applications etc.  
In general the cost of developing a good implementation can be higher that the cost of purchasing.  
It depends what you need.

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**Icy Mountain**  
20th April 2005 04:33 PM

I created an Access relational database for FMEA from scratch. That way you can put the features in you want and leave out the ones you don't need. Anybody with a passing knowledge of Basic programming can get this done. You can database image files, documents, numbers, entries, whatever your programming skills and experience will allow. I do it myself because I enjoy it, the canned programs generally do more than I want but not what I want, and they are too expensive for what you get.

I also have an Excel Spreadsheet that another friendly Supplier of the Customer gave me. It has the whole PPAP, APQP, etc. in one file with multiple sheets. You start at sheet one with Customer Name and as you fill it in it puts the relevant info on the right forms in the right places. I believe the Original came from AIAG.

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**Howard Atkins**  
21st April 2005 07:50 AM

There is a DELPHI version of the excel sheet as an attachement at the cove.  
Does your version have a relationship between the flow chart, CP and FMEA, this is the real problem to maintain this unity.

---

**Icy Mountain**  
21st April 2005 04:35 PM

**Sorta**

The Access database is a nifty tool for keeping all of your FMEAs in one place, updating, adding and printing. No connection to Flow or Control Plan.

The Excel connects flow to FMEA to CP but only in a rudimentary way with the title blocks. It does not connect the flow boxes to FMEA potentials to Control Plan control items.

Wouldn’t it be really cool to have a big open source Access APQP database developed here at the Cove. Oh, it gives me a headache just thinking about it.

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**Marc**  
21st April 2005 04:51 PM
I would LOVE to see an open source solution, but I’d prefer it in MySQL or PostgreSQL rather than Access.

<table>
<thead>
<tr>
<th>nickh - 2011</th>
<th>21st April 2005 07:11 PM</th>
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<tbody>
<tr>
<td>I have seen a number of Access developed FMEA products on the market, but none that are open source. Having developed a number of Access databases in the past, I would offer the following advice:</td>
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<tr>
<td>1. You’re probably better off not attempting to integrate process flow charting directly into the database. A more workable solution is to allow the user to upload a flow chart created in another application and have the Access database store it in a controlled directory and just display a link to the file. (Off topic: My preference is to do the flow charts in Excel, since not everyone has Visio, RFFlow, Smartdraw, etc.).</td>
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<tr>
<td>2. Expect problems if the database grows large. I’ve created some that started with small user bases that eventually grew to several hundred people. There’s a reason that Microsoft recommends using it for only a small number of concurrent users (5-10). A pet project can turn into a babysitting headache. This is the kind of situation that gives Access a bad name. It's perfect for small groups, but beyond that it just doesn't scale well.</td>
<td></td>
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<tr>
<td>3. Learn to design disconnected forms. By that I mean that the data in the forms is not live. I think Access calls them &quot;bound&quot; fields when they are connected directly to the data source. Using bound forms can lead to a lot of concurrency issues (two or more users trying to access the same data at the same time). By default, the forms wizards create bound forms, so it is more of a hassle to create disconnected ones.</td>
<td></td>
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<tr>
<td>4. Run the compact / repair indexes at least once a week and even more frequently if the database grows large.</td>
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<table>
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<tr>
<th>Joe Cruse</th>
<th>22nd April 2005 02:40 PM</th>
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<tr>
<td>This would be a nice project to work on, but I tend to agree with Marc and nickh that MySQL would be a more appropriate platform, at least for the Back End of the project. Might do a MySQL back end and craft an MS Access front end for the data entry and bells and whistles. There are too many folks out there that would have enough data entry to overload Access.</td>
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<tr>
<td>I would also tend to agree on linking to other applications for stuff like charts, as MS Access chart capabilities are not all that great. It tends to be more limiting than Excel, even though they use the same application for charts. Just harder to deal with in Access.</td>
<td></td>
</tr>
<tr>
<td>We are a smaller company, and Access has worked great for relational database work for us, including a LIMS, safety records, and quality records. We had, to this point, only captured CA/PA activity in our setup, but I'm transferring all our customer complaint, raw material nonconforming, in-process nonconforming, and customer complaints into this system. Internal audits are next, once I get my changes to a process-based audit style in place.</td>
<td></td>
</tr>
<tr>
<td>I'd love to learn MySQL and VB, but there's not enough time in the day.</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>nickh - 2011</th>
<th>22nd April 2005 07:16 PM</th>
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</table>
Someone will need to double check this if they're interested, but I don't think that MySQL natively supports transactions yet. I believe that you need to use InnoDB tables to do this. Last I checked using InnoDB required a $$ license. I've only used MySQL for personal projects - several years back - so I'm no authority on it. If you're going to develop a database system to support quality systems, I think that you'd definitely want to use a system that supported transactions.

Also, if you're using Access, I assume that you're an MS shop. PostgreSQL (which does natively support transactions) nows will run on Windows as of their 8.0 release.

---

**pampas2**

24th May 2005 11:44 AM

The closest I've come is to develop and ECN tracking and input system and a Corrective Action Report database in Access. I'd be glad to purge the records and send you a sample if you are interested.

Paul

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**Howard Atkins**

25th May 2005 12:54 AM

This will not help do the work but should save the money

Open Office discussed here


has an Access database function

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**tracy5000**

25th May 2005 03:27 PM

Paul,

I'd be interested in a purged version of your database - I'm getting ready to start trying some similar type stuff for auditing stuff

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**jacko**

16th September 2005 10:24 AM

any chance of getting your excel version of the ppap forms?

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**jacko**

5th October 2005 10:42 AM

any version

I would like to get any version of some PPAP software. Can anyone help me with this?

---

**Howard Atkins**

5th October 2005 12:25 PM
Quote:

In Reply to Parent Post by jacko
any chance of getting your excel version of the ppap forms?

Welcome to the cove
Look here for the file
http://elsmar.com/Forums/showthread.php?t=4861

jacko
5th October 2005 12:37 PM

Thanks

thanks for the file.... I am in need of this.

Manix
2nd May 2007 07:07 AM

Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

This thread seems to have evolved over the last 6 years, and is the only one I can find when talking about using Access as a tool for integrating APQP activities and documentation.

I am looking to implement a similar system, I am calling it the "Project Portal". This will allow me to record all Project specific data ONCE, and use this data for numerous activities and documentation.

I currently find that there are so many separate requirements and forms etc.... that I am replicating so much data, and jumping around between Word, Excel, Form to Form, checklist to checklist.

We are a small organisation and on the APQP and Project Management side of things I am the main man. Maybe one or two others may also be involved, but the database will probably not used by many users at all.

My main question I put to you all is, has anyone used Access on any element of the APQP/PPAP/Project Management side of things? If so is anyone prepared to share their experiences, tools, tips and techniques?

I am interested to know if there are any more Canned products out there, but really, given the size of our operation, these are not always viable, and simply create yet another bit of software/location in which to store data! I want something that will help minimise the duplication of effort, and effectively mould to the way we work.

Input always appreciated......I hope this thread does not get lost in the ether, just didn't want to start a new one as this thread is just a perfect place to discuss (or continue to discuss as it were).

Matt W - 2009
16th August 2007 06:01 AM

Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.
Now I have to confess that I’m not an active user of these forums, but I came across this thread some time ago when researching using Access to create an APQP database and having revisited it since then and seeing the most recent post on the subject I thought I’d register on the forum to share my experiences.

From the outset as I should make it clear that I’m not an Access programmer, or for that matter have any kind of formal Access training, I’m a Project Manager for an engineering business and I’m not posting this to sell my database (or give it away for that matter!). But simply to answer Manix’s question, yes, it is possible to use Access as a database for APQP/PPAP/Project Management and do so very successfully.

About 3 years ago the company I work for was working towards Q1 accreditation, the big problem was how we controlled and managed our PPAP process, due mainly to the large number of components and suppliers involved. It was decided that a database needed and I was tasked with selecting a suitable one for the business. During the course of my research I found that the majority of products on the market just weren't suitable for my needs, they either cost too much, or they had dozens of features I didn't need and none of the ones I did, they didn't work the way I wanted them to or were just plain too complicated. So the decision was taken that we should develop our own database and being the person with the most knowledge of Access I was given the task.

The database initially took about 2 weeks to develop from scratch, it wasn’t perfect by any means, but it was a good start and it has continued to develop over time and it’s now a very solid and reliable database, even in a multi-user environment. The database covers the following aspects of the APQP/PPAP process (not an exhaustive list); Bill of Materials, PPAP and IMDS status of child parts (including an annual revalidation timetable), Process Flow, Control Plans (linked to the Process Flow), PFMEA (again linked to the Process Flow), OEE and the PSW front sheet. The likes of the OEE and PSW can be exported to Excel spreadsheets, as many customers want these documents in their own Excel format rather than using the standard AIAG ones.

Admittedly not being an Access programmer the database may not be written as an expert would do it, but being an engineer and understanding how the various bit of information are used is a great advantage and allows a greater degree of freedom. I feel the main benefit though of developing your own database is the flexibility it gives you of being able to tailor a database to the way your business works. I’ve attached a couple of screenshots for information.

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Manix

28th August 2007 09:43 AM

Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

Thanks Matt W and welcome to the cove. I am glad my post prompted you to register and share your experience. Your DB looks very, VERY similar to the sort thing I would like to achieve. You seem to be in the same position I am currently, Projects Manager looking for a way to streamline our APQP projects. I too am not an Access programmer but I have learnt quite a bit over the last year or so and have produced a Tooling Database, a Material Reporting Portal (to monitor and record IMDS and RoHS compliance of all of our products) and I am also currently working on a Customer Complaints, Non-Conformance and Customer Return database, all using Access.

I agree that whenever I start work on these sorts of projects, I find that current commercially available packages just don't do what I want them too and/or are overkill and thus overpriced!

Your input and screenshots have given me some good ideas as to how I maybe able to achieve a more streamlined and organised approach to managing data.

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I will endeavour to try and develop something, though 2 weeks is an optimistic target, I will post my experiences here!

Jennifer Kirley 17th September 2007 08:59 AM

Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

How is this going, Manix? I am also very interested in such a tool. I regret to say I am a noob with Access and VB, thus no help in designing such a database database.

Manix 18th September 2007 04:23 AM

Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

Quote:

In Reply to Parent Post by Jennifer Kirley (Post 213965)
How is this going, Manix? I am also very interested in such a tool. I regret to say I am a noob with Access and VB, thus no help in designing such a database database.

Hi Jennifer, thanks for your interest. Sorry, nothing yet, as I have been pulled away on other things! I am still rounding off the Concern Database (NCM, Cust Complaints, Cust Rtns & Audit findings) and will try and publish some output from that in the near future.

I will produce an APQP type database and I PROMISE to publish some of my ideas here. Watch this space. You never know, you may have just spurred me on to get on with it!!!!

jacko 4th February 2008 07:43 PM

Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

Quote:

In Reply to Parent Post by Manix (Post 214103)
Hi Jennifer, thanks for your interest. Sorry, nothing yet, as I have been pulled away on other things! I am still rounding off the Concern Database (NCM, Cust Complaints, Cust Rtns & Audit findings) and will try and publish some output from that in the near future.

I will produce an APQP type database and I PROMISE to publish some of my ideas here. Watch this space. You never know, you may have just spurred me on to get on with it!!!!

Any luck with that yet? I wish I had time to develop something like that. Your screenshots look good to me.

Manix 5th February 2008 04:15 AM
Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

Quote:

In Reply to Parent Post by jacko (Post 234600)
Any luck with that yet? I wish I had time to develop something like that. Your screenshots look good to me.

Sorry not as yet. I have been very busy with other things over the last few months. I will of course try to keep this thread up to date with any updates I do have.

dyfhid
1st March 2008 11:36 PM
Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

> Material Reporting Portal (to monitor and record IMDS and RoHS compliance of all of our products)

I have been assigned the task of writing a RoHS Database for my firm, a marine electronics manufacturer. I have written several databases and digital dashboards for the company thus far. I am the Supplier Quality Tech, and have been maintaining the RoHS Certs received from Suppliers as part of the First Article Process. With the changes coming down the pike for RoHS and WEEE my boss has decided that I should be electronically maintaining the RoHS documentation.

We are also implementing a requirement of component level test results for RoHS, and I need to include that. We are in the process of scanning all the paper certs we have received thus far and I am thinking that the database should include links to the scans, at a minimum, but I was looking for other folks who may have already gotten such a thing done to look for ideas, when I came across the revival of this thread, and the mention quoted above of the Material Reporting Portal.

I wonder if it is possible to post screenshots to glean ideas from?

hansin
20th April 2008 10:26 PM
Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

Quote:

In Reply to Parent Post by Matt W (Post 209070)
Now I have to confess that I’m not an active user of these forums, but I came across this thread some time ago when researching using Access to create an APQP database and having revisited it since then and seeing the most recent post on the subject I thought I’d register on the forum to share my experiences....

Can I share with it?

Marc
20th April 2008 11:20 PM
Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.
Assuming they are stripped of company specific markings and information, those of you who have a database you are willing to share -- It will be VERY much appreciated!

Marc

Manix

Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

Quote:

In Reply to Parent Post by Marc (Post 245533)
Assuming they are stripped of company specific markings and information, those of you who have a database you are willing to share -- It will be VERY much appreciated!

Marc

Absolutely. This would help generate ideas and aid others. This is how I have learnt databasing so far, by looking at others DBs and learning how they have developed functionality etc....

hansin

Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

Quote:

In Reply to Parent Post by Manix (Post 245549)
Absolutely. This would help generate ideas and aid others. This is how I have learnt databasing so far, by looking at others DBs and learning how they have developed functionality etc....

I want to get it and learn how to creat a appq database,but i am poor in access!

Matt W - 2009

Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

I have been working on a stripped down version of my database for some time now as I've left my previous company and in my current role I personally have no use for it now. So as such I felt it would be better to share it than just leave it to gather dust so to speak. However with work commitments etc this is a very low priority for me, watch this space as I will post it at some point in the future - although what timescale this may be I've got no idea!

Manix

Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.
**In Reply to Parent Post by Matt W (Post 245951)**

I have been working on a stripped down version of my database for some time now as I've left my previous company and in my current role I personally have no use for it now. So as such I felt it would be better to share it than just leave it to gather dust so to speak. However with work commitments etc this is a very low priority for me, watch this space as I will post it at some point in the future - although what timescale this may be I've got no idea!

Thanks Matt, that would be great if you can share it. We look forward to seeing it sometime in the future! :)

---

**processanalyzer**

**Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.**

3rd June 2008 02:35 PM

I was lucky enough to sit in on a demonstration of software that is being developed that uses Microsoft office, the access and excell, and if you think this stuff has no power you are missing the most incredible thing you will ever see. It is equal to minitab in every way and might have more capabilities. If I may say, the company is Dbar-innovations, look in the www. call them and get a demo, it is worth it if for any other reason to see what they did with a cheap little Microsoft package.

**Amouchicou**

**Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.**

14th November 2008 02:00 PM

If you can develop with VB in access, then there is little limitation to what you can't do. The big question is: is it worth it?? buying software vs. create your own tool.

**Manix**

**Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.**

17th November 2008 04:22 AM

Yes a balancing act indeed. But think of it this way: Buying "off the shelf" means less development resource, but does mean (unless you are very lucky!) adjusting your processes and procedures to suit the software. Which means HR resource in terms of physically implementing the require changes and holding the changes in terms of training etc....

A self-developed kit can be tailored to how you actually do this. However of course this consumes more resource on the development front. However, it is dangerous game in terms of just replicating what you currently do, this may not be the best way to do it!!! An established off the shelf option may include best practice!!!
Like I say a balancing act, especially in terms of APQP, that is supposed to be a standardised approach to product realisation anyway!!!? :bonk:

mcward316 1st March 2012 11:52 AM
Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

Matt W / Manix, did you ever come up with something worth posting? I think it would be extremely valuable. Thanks.

Stijloor 1st March 2012 12:04 PM
Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

Quote:

In Reply to Parent Post by mcward316 (Post 471842)
Matt W / Manix, did you ever come up with something worth posting? I think it would be extremely valuable. Thanks.

Welcome to The Cove Forums!:bigwave: :bigwave:

Matt has not been here since 26th May 2009.

I doubt if he will post something.... :nope:

Stijloor.

mcward316 1st March 2012 12:10 PM
Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

Quote:

In Reply to Parent Post by Manix (Post 214103)
Hi Jennifer, thanks for your interest. Sorry, nothing yet, as I have been pulled away on other things! I am still rounding off the Concern Database (NCM, Cust Complaints, Cust Rtns & Audit findings) and will try and publish some output from that in the near future.

I will produce an APQP type database and I PROMISE to publish some of my ideas here. Watch this space. You never know, you may have just spurred me on to get on with it!!!!

Manix? How is your progress going?

Manix 2nd March 2012 05:00 AM
Re: Microsoft Access - APQP type database for process flow, fmea, control plan, etc.

Quote:

In Reply to Parent Post by mcward316 (Post 471848)
Manix? How is your progress going?

Hi and Welcome to the cove.

I do have a Quality Concern Database that includes customer concerns, NCMS, corrective actions, supplier performance etc... but I cannot post anything here without significant work in neutralising it and scaling it down. Also I don't think it is the best developed piece of kit as it's kind of grown organically. It is very cumbersome in terms of structure, I am sure a "real" programmer would probably have a heart attack if they saw it!!

In terms of APQP elements, I am no further forward. It is still an area of interest for me to develop, as learning lessons from precious projects is important to us, so the FMEA element is critical to enable this.

If you are more specific on what you want ot get from such a tool, I may be able to offer you snippets on how we have tackled it using Access. We have recently moved to Access 2010 which is much "nicer" to use and develop than previous versions, though all my best work resides in 2003.

Happy to help with anything specific you need help with :) Let me know.

mcward316
2nd March 2012 08:32 AM

Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

Manix, Thanks for the reply. I really think Access is the way to go because it is so easy to share and easy to modify. I'll offer the same to you, if you have any ideas on how to accomplish something in Access, feel free to ask. I have done some things similar to Quality DB, but never what we might call "documentation management", such as FMEA or 8D. I'm at the point where I think I will start this. It'd be nice if someone who has done this would post their code. Ain't nothing out there I've found yet worth spending money on.

In regards to Access 2010, let's just say I'm glad I didn't start all this before the transition to 2010, as so many features have gone away and the whole interface has changed. But, I agree, much nicer interface. I just wish Microsoft would make developing forms in Access as nice as Visual Studio.

togotogotogo
2nd May 2013 05:09 PM

Re: Microsoft Access APQP type database for Process Flow, FMEA, Control Plan, etc.

This sounds intersting. Would it be possible to share your experience (or even your access database)?
The Deming PDCA Cycle
QMS Implementation
FMEA Information
APQP Information
Auditing
B-D Problem Solving
Statistics
Error Proofing (Poka Yoke)
Brainstorming
Information
Pull Systems
Lead Time Reduction
Planned Maintenance
Quick Setup
Identifying Waste
Process Capability - Cp vs. Cpk
History Animation
Taguchi Loss Function
Discovering Change
Process Loop Animation
Fishbone / Cause and Effects Animation

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(513) 341-6272

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