

[MUSIC]

[Pop captions up]

**Merlin Mann:** HEY YOU EVER FEEL LIKE YOUR COMPUTER'S  
PUSHING YOU AROUND?  
ALWAYS TRYING TO TELL YOU WHAT TO DO?  
I'M MERLIN MANN FROM  
43FOLDERS.COM AND TODAY I'M  
GONNA SHOW YOU HOW TO STOP  
ACCEPTING DEFAULTS, TODAY ON "THE LAB".

[MUSIC]

[Beeping]

[MUSIC]

**Leo:** HEY HOW ARE YOU?

[Pop captions up]

**Leo:** GOOD TO SEE YOU AND  
WELCOME TO "THE LAB".  
I'M LEO LAPORTE AND THIS IS THE  
SHOW WHERE WE HELP YOU WITH  
YOUR TECHNOLOGY WOES.  
WE SHOW YOU HOW TO BUY  
TECHNOLOGY, HOW TO USE IT, HOW  
TO LOSE IT WHEN YOU'RE DONE.  
LADIES AND GENTLEMEN THE LOVELY  
KATE ABRAHAM.

**Kate:** HELLO.

**Leo:** HI KATE.

**Kate:** WE ARE CO-ORDINATED TODAY.

**Leo:** I DIDN'T PLAN IT.

**Kate:** LOOK AT THAT.

**Leo:** BUT WE DID, THIS IS  
PURPLE DAY ON OUR SHOW.

**Kate:** INDEED.

**Leo:** WE'VE GOT SOME GREAT STUFF.  
ACTUALLY WE'VE GOT RAY MAXWELL  
HERE, MR. COLOUR.

**Kate:** YEAH.

**Leo:** HE'S GONNA SHOW YOU HOW  
TO TAKE A PHOTOGRAPH AND TURN  
IT INTO A LINE DRAWING THAT'S  
VERY COMPACT.

**Kate:** OKAY.

**Leo:** THEY CALL IT VECTOR ART.

[Pop captions down]

**Leo:** I DON'T KNOW HOW HE'S  
DO THIS, MAGIC SOMEHOW.  
MERLIN MANN'S GONNA SHOW YOU  
HOW TO TWEAK YOUR MEATBALLS.

**Kate:** HE'S --

**Leo:** IS THAT HE SAID?

**Kate:** TWEAK YOUR MEATBALLS.

**Leo:** TWEAK YOUR MEATBALLS.

**Kate:** HE'S SO FUNNY.

**Leo:** NO MORE ACCEPTING MEATBALLS?

I DON'T KNOW WHAT THAT IS.

WHOA OH DEFAULTS?

OH THAT'S DIFFERENT.

[Kate laughs]

**Leo:** I LOVE MERLIN.

HE'S THE GREATEST.

HE'S MY AN OLD FRIEND.

OH AND NOW SPEAKING OF OLD

FRIENDS KRIS KRUG IS BACK.

**Kate:** YEAH.

**Leo:** AND HE'S GONNA SHOW YOU  
AND THEY'RE HE'S ACTUALLY DOING  
WORK WITH CHINA NOW AND HOW  
TECHNOLOGY IS BRIDGING THE  
CULTURAL DIVIDE --

**Kate:** YEAH.

**Leo:** AND THE POLITICAL DIVIDE.  
IT'S JUST FASCINATING STUFF.  
THAT'S COMING UP.  
WE'VE GOT A GREAT SHOW.  
LOTS OF CALLS TOO.

**Kate:** INDEED.

**Leo:** IN FACT LET'S GET OUR  
CALL OF THE DAY.

**Kate:** INDEED. WE'RE GOING TO DAVIDSON IN  
QUEBEC AND WE HAVE DENNIS ON  
THE LINE.

**Leo:** HELLO DENNIS, THANK YOU KATE.  
HELLO DENNIS.

[Pop captions up]

**Dennis:** HELLO LEO.

**Leo:** HOW ARE YOU SIR?

**Dennis:** VERY GOOD AND YOU?

**Leo:** VERY WELL.

WHAT CAN I DO FOR YOU TODAY?

**Dennis:** THANK YOU VERY MUCH  
FOR THE OPPORTUNITY.

I HAD VIDEOTAPED A FRIEND OF  
MINE ON A SONY DV CAMERA.

**Leo:** MMM-HMM.

**Dennis:** AND WHAT I'M TRYING

TO DO IS I'M TRYING TO PRODUCE  
A CD FROM THE AUDIO.

**Leo:** JUST THE AUDIO?

**Dennis:** JUST THE AUDIO.

**Leo:** OKAY.

**Dennis:** SO I'D LIKE TO PUT  
IT THROUGH SOME, SOME SORT OF  
EQUALIZER TO SET THE LEVELS AND  
THEN I'D LIKE TO BE ABLE TO  
RECORD IT ONTO A CD AND I'VE  
BEEN HAVING MAJOR DIFFICULTIES  
FINDING PROGRAMS TO USE FOR  
THAT SORT OF THING.

**Leo:** MAC OR WINDOWS?

**Dennis:** MAC.

**Leo:** MY FIRST SUGGESTION IS  
BEFORE YOU DO ANYTHING TO THE  
AUDIO IS TAKE OUT OF THE VIDEO  
AND THERE A NUMBER OF THERE ARE  
KIND OF LOTS OF FREE PROGRAMS  
YOU COULD USE.

DO YOU WORK WITH VIDEO A LOT?

**Dennis:** AH YEAH MORE THAN AVERAGE.

[Pop captions down]

**Leo:** I'D SAY THIS IS MY  
STRONG SUGGESTION AND EVERYBODY  
I KNOW WHO WORKS WITH VIDEO  
DOES THIS.

SPEND 30 BUCKS AND UPGRADE  
QUICKTIME THIS IS MAC OR  
WINDOWS TO QUICKTIME PRO.

**Dennis:** QUICKTIME PRO, OKAY.

**Leo:** ONCE YOU UP, NOTICE

THAT THIS IS UN-UPGRADED  
VERSION OF QUICKTIME.

[Pop captions up]

**Leo:** IN FACT SEAN WE NEED TO  
UPGRADE OUR VERSION.

[Laughs]

**Leo:** SO WHEN YOU BUY QUICK  
OR ACTUALLY WHEN YOU OPEN YOUR  
MAC AND YOU'VE GOT QUICKTIME OR  
YOU DOWNLOAD QUICKTIME ON  
WINDOWS YOU'LL SEE THAT SOME OF  
THE FEATURES ARE GREYED OUT  
CAUSE THEY SAY PRO.

**Dennis:** OKAY.

**Leo:** THESE ARE ALL THINGS  
THAT YOU GET IF YOU PAY FOR IT.

IT'S ONLY 30 BUCKS.

BUT THE PART THAT YOU'RE GONNA  
REALLY LIKE IS THAT YOU COULD  
EXPORT, NOW OF COURSE I CAN'T  
DO IT BECAUSE IT WE HAVEN'T, WE  
HAVEN'T PAID FOR IT.

ACTUALLY WE HAVE A LICENSE SOMEWHERE.

WE JUST HAVEN'T ENTERED IN.

WE COULD EXPORT THE AUDIO ONLY  
AS AN MP3 OR AAC OR WAV OR  
WHATEVER FORMAT YOU WANT.

SO YOU CAN OPEN YOUR MOVIE AND  
JUST SAVE OUT THE AUDIO.

THERE IT IS THE AUDIO TRACK.

NOW YOU CAN EQ IT, NOW YOU CAN EDIT IT.

NOW YOU CAN BURN IT TO CD, ALL  
OF THAT STUFF.

**Dennis:** OH OKAY.

**Leo:** THE PROGRAMS THERE ARE  
A NUMBER OF GOOD PROGRAMS YOU  
CAN USE TO EDIT THE AUDIO.  
DO YOU HAVE AN AUDIO EDITING  
PROGRAM YOU USE?

**Dennis:** AH I DON'T HAVE A  
JUST BASICALLY THE ONE IN FINAL CUT.

**Leo:** WELL THAT'S FINE,  
SOUNDTRACK PRO IS LIKE THE  
HIGH-END STUFF SO IF YOU'RE  
COMFORTABLE WITH THAT.  
IF YOU HAVE FINAL CUT YOU HAVE  
QUICKTIME PRO.

**Dennis:** OH I'M SORRY NO, I,  
I, I HAVE FINAL CUT EXPRESS.

**Leo:** I CAN'T REMEMBER.  
YEAH THAT DOESN'T COME WITH SOUNDTRACK.  
AND I CAN'T REMEMBER IF IT  
GIVES YOU AN UPGRADE AUTOMATIC.  
IT SHOULD FOR THE PRICE, BUT  
ANYWAY IF IT DOESN'T IT'S WORTH  
PAYING THE 30 BUCKS.

A COUPLE OF GOOD PROGRAMS I  
WOULD RECOMMEND.  
THIS IS ONE VERY GOOD AUDIO  
EDITOR CALLED FISSION.  
IT'S FROM ROGUE AMOEBA BUT THEY  
DO REALLY NEAT STUFF.  
THIS IS SIMPLE TO USE,  
STRAIGHTFORWARD, NOT VERY  
EXPENSIVE, 32 BUCKS.  
HERE'S ANOTHER ONE THAT I

REALLY LIKE ITS CALLED AMADEUSPRO.

I, I JUST HAPPEN TO KNOW A  
LITTLE BIT ABOUT AUDIO EDITING  
PROGRAMS ON THE MACINTOSH.  
THIS IS FROM HAIRERSOFT,  
ANOTHER \$30 PROGRAM, THIS DOES  
MULTI-TRACK, WHICH I LIKE.  
ALL OF THESE WILL ALLOW YOU TO  
SAVE IT OUT AS MP3 AND THEN IF,  
IF YOU DON'T WANT TO SPEND ANY  
MONEY AND YOU'RE WILLING TO PUT  
UP WITH SOMETHING THAT'S A  
LITTLE ROCKIER, NOT QUITE AS  
DURABLE AUDACITY IS GOOD.  
AUDACITY AT SOURCEFORGE.NET,  
THIS IS MAC AND WINDOWS.

**Dennis:** AUDACITY.

**Leo:** AND LINUX, AUDACITY AND  
THAT'S ABSOLUTELY FREE.  
SO THERE'S THREE GOOD PROGRAMS.  
SO I WOULD SAY DO SPEND 30  
BUCKS THOUGH TO UPGRADE QUICKTIME.  
IF YOU WORK WITH VIDEO AT ALL  
QUICKTIME PRO IS REALLY A  
FANTASTIC PROGRAM.  
NOW SEAN DOES HAVE A COUPLE OF  
YOU WANT TO SHOW?  
OH YOU COULD DO IT ON YOURS.

**Sean Carruthers:** I DO HAVE THIS ON THIS.  
IT'S NOT HOOKED INTO OUR SWITCHER.

**Kate:** I HAVE IT AS WELL.

**Sean Carruthers:** AND KATE HAS IT AS WELL.

**Leo:** SO ALL OF YOU HAVE

UPGRADES EXCEPT ME.

**Sean Carruthers:** YEP.

**Leo:** I'M THE ONE WHO'S  
PLAYING WITH THE UNLICENSED VERSION.

BUT IT'S VERY SIMPLE.

YOU JUST SAVE IT OUT AND YOU  
CAN SAVE IT IN ALMOST ANY FORMAT.

KATE'S GONNA SHOW YOU.

THERE IT IS.

SO IT'S UNDER SAVE AS OR I'M SORRY EXPORT.

YOU CAN EXPORT IT TO ALMOST ANY FORMAT.

**Sean Carruthers:** YEAH I, I

DEFINITELY RECOMMEND THIS AS  
WELL FOR VIDEO USERS.

WE ACTUALLY USE THIS FOR  
RENDERING OUT ALL OF OUR  
DIFFERENT VERSIONS IN FOR, FOR  
"LAB RATS" WHEN WE DO THIS.

**Leo:** YEAH.

**Sean Carruthers:** CAUSE WE TAKE ONE MASTER FILE RENDER OUT  
DIVX WINDOWS MEDIA.

**Leo:** YOU SAVE IT YEAH AND IF  
YOU JUST WANTED THE AUDIO.

**Sean Carruthers:** RIGHT YOU CAN DO THE AUDIO AS WELL.

**Leo:** DO YOU, DO YOU EVER  
JUST MP3 AUDIO "LAB RATS"?

**Sean Carruthers:** AH WE HAVE SOMEONE ELSE DO THAT FOR US  
WITH A DIFFERENT TOOL.

BUT WE COULD DO THAT AS WELL.

**Leo:** CERTAINLY COULD DO IT,  
YEAH, ALL RIGHT?

THANKS FOR THE CALL DENNIS.

**Dennis:** YEAH THANKS.

**Leo:** I HOPE THAT HELPS.

**Dennis:** YES IT DID.

**Leo:** YEAH IT, IT --

[Both talking at once]

**Dennis:** THANKS VERY MUCH FOR  
ALL OF YOUR HELP.

**Leo:** IF YOU DO A LOT OF I  
USE FINAL CUT EXPRESS TOO BY  
THE WAY AND I, I'M VERY HAPPY WITH IT.  
I DON'T FEEL THE NEED TO BUY  
THE \$1,300 FINAL CUT PRO OR  
STUDIO I GUESS THEY CALL IT.  
EXPRESS IS GREAT AND BUT IT'S,  
BUT IT'S WORTH SPENDING A  
LITTLE BIT MORE TO GET  
QUICKTIME PRO.  
IT JUST HAS SO MANY THINGS.  
IT CAN YOU KNOW YOU CAN I MEAN  
IT'S JUST A LITTLE, A GOOD  
LITTLE TOOLKIT TO HAVE.

**Dennis:** GREAT.

**Leo:** THANKS DENNIS.

**Dennis:** THANK YOU.

**Leo:** TAKE CARE.

**Dennis:** OKAY.

[Pop captions up]

**Leo:** HEY COMING UP YOU KNOW  
THERE ARE TWO KINDS OF IMAGE  
FORMATS IN GENERAL.  
THERE'S BIT MAPS WHERE THERE'S  
A DOT FOR EVERY YOU KNOW COLOUR  
OR, OR, OR SHADE AND THEN  
THERE'S SOMETHING CALLED LINE

DRAWINGS, VECTOR DRAWINGS.  
FLASH FOR INSTANCE IS VECTOR- BASED.  
THE ADVANTAGE OF VECTOR IS IT  
SCALES BEAUTIFULLY TO ANY SIZE  
AND IT'S MUCH FASTER.  
CAN BIT MAPS BE TURNED INTO VECTORS?  
RAY MAXWELL SAYS THEY CAN AND  
WE'LL SHOW YOU HOW, A GREAT WAY  
TO SAVE SIZE WHEN "THE LAB" CONTINUES.  
STAY RIGHT HERE.

[Pop captions down]

[MUSIC]

[Commercial break]

[MUSIC]

**Leo:** OUR OLD FRIEND, OUR  
GREAT FRIEND RAY MAXWELL IS HERE.  
HE IS AN, AN ELECTRONICS  
ENGINEER, A COLOUR SCIENTIST, A  
TEACHER, SPEAKER, PHOTOGRAPHER.  
HE EVEN FLEW A GLIDER IN A  
SUPER BOWL COMMERCIAL.

**Ray Maxwell:** THAT'S RIGHT.

**Leo:** I REMEMBER THAT ABOUT YOU.

**Ray Maxwell:** YEAH.

**Leo:** THAT'S PRETTY COOL.

**Ray Maxwell:** YEAH.

**Leo:** TODAY WE'RE GONNA USE  
SHOW HOW YOU CAN TAKE A, A  
PHOTO AND TURN IT INTO VECTOR ART.

[Pop captions up]

**Ray Maxwell:** NOW THERE'S  
YOUR LAST CALLER I JUST WANT TO  
GIVE ONE HINT.

YOU CAN SAVE THE 30 BUCKS IF  
YOU BUY FINAL CUT STUDIO FOR \$1,500.

**Leo:** YES.

**Ray Maxwell:** YOU GET IT FREE.

**Leo:** YOU GET IT FREE.

[Pop captions down]

**Leo:** WHAT A DEAL, SUCH A DEAL.

YEAH AND I WAS TRYING TO  
REMEMBER FINAL CUT EXPRESS AND  
I DON'T THINK THEY DO INCLUDE THAT.

**Ray Maxwell:** NO.

**Leo:** THEY DON'T BUNDLE THAT.

**Ray Maxwell:** NO.

**Leo:** YOU ONLY PAID 300 BUCKS.  
YOU DON'T GET THE FREE QUICKTIME.

**Ray Maxwell:** YEAH.

**Leo:** YEAH I KNOW IT'S SUCH A DEAL.  
IT'S SUCH A DEAL.

SO WE, WE HAVE A NICE, A, A  
LOVELY PHOTO OF ME.

**Ray Maxwell:** A LOVELY PHOTO  
OF YOUR BIRTHDAY PARTY.

**Leo:** NOW THESE ARE, THESE  
ARE CALLED BIT MAPS OR RASTER  
IMAGE RIGHT?

**Ray Maxwell:** THIS IS I'M IN PHOTOSHOP RIGHT NOW.

**Leo:** MMM-HMM.

**Ray Maxwell:** AND WHAT I'M  
GONNA DO IS I'M GONNA SHOW YOU  
HOW WE CAN TURN IT INTO  
ARTWORK, POSTERIZE IT.

**Leo:** OKAY.

**Ray Maxwell:** AND THEN I'M

GONNA DO THE SAME THING IN  
ILLUSTRATOR AND SHOW YOU THE DIFFERENCE.

**Leo:** OKAY GOOD.

**Ray Maxwell:** OKAY?

SO THE FIRST THING WE'RE GONNA  
DO IS WE'RE GONNA TAKE THIS  
LOVELY PICTURE.

**Leo:** LOVELY YEAH, THANK YOU RAY.

[Pop captions up]

**Ray Maxwell:** THE MAN OF A THOUSAND FACES AND 10,000  
VOICES.

**Leo:** I DON'T KNOW, A SCARY FACE.

**Ray Maxwell:** WE'RE GOING TO  
GO IN HERE AND WE'RE GOING TO  
POSTERIZE LEO HERE.

[Pop captions down]

**Ray Maxwell:** AND LET'S BRING  
IT UP TO MAYBE SIX LEVELS OR SO  
AND WE'VE POSTERIZED IT.

**Leo:** NOW THAT'S STILL A BIT  
MAP THOUGH ISN'T IT?  
A DOT FOR EVERY DOT RIGHT?

**Ray Maxwell:** THAT'S STILL A DOT.  
AND SO IF I GO IN AND BLOW THAT UP --

**Leo:** YOU SEE ITS PIXELATED.

**Ray Maxwell:** WE SEE ALL --

**Leo:** YEAH.

**Ray Maxwell:** THESE LITTLE PICTURES.

**Leo:** RIGHT.

**Ray Maxwell:** AND SO FORTH.  
ALL RIGHT NOW I'M GOING TO  
SWITCH OVER TO ILLUSTRATOR AND

--

**Leo:** ANOTHER ADOBE PRODUCT.

**Ray Maxwell:** ANOTHER ADOBE  
PRODUCT COMES IN THE CREATIVE SUITE.

[Pop captions up]

**Leo:** YEAH.

**Ray Maxwell:** IF YOU BUY THE  
CREATIVE SUITE THIS IS IN IT  
AND I'M GONNA GO IN AND PLACE  
THAT SAME IMAGE THAT BIT MAPPED  
IMAGE INTO --

[Pop captions down]

**Leo:** NOW DID YOU DO THE POSTERIZE?  
NO THE ORIGINAL RASTER OKAY.

**Ray Maxwell:** RIGHT THIS IS  
THE ORIGINAL RASTER IMAGE AND  
I'M GONNA TAKE IT HERE AND I AM  
GOING TO SCALE IT.

**Leo:** RASTER AND BIT MAP ARE  
ABOUT THE SAME THING?

**Ray Maxwell:** YEAH.

**Leo:** INTERCHANGEABLE?

**Ray Maxwell:** WELL --

[Laughs]

**Leo:** I KNOW IF I ASK RAY  
HE'S GONNA GIVE ME THE  
TECHNICAL ANSWER.

**Ray Maxwell:** NO THEY'RE NOT THE SAME.

**Leo:** THEY'RE NOT.

[Pop captions up]

**Ray Maxwell:** RASTER EACH PIXEL HAS BIT DEPTH.

**Leo:** OKAY.

**Ray Maxwell:** 8, 16 BITS.

**Leo:** THAT'S HOW MANY DIFFERENT COLOURS --

[Pop captions down]

**Ray Maxwell:** A YEAH.

**Leo:** GET REPRESENTED BY THE BIT DOC.

**Ray Maxwell:** A BIT MAP ONLY

HAS ONES AND ZEROS AND IT'S THE

FINAL FILE THAT GOES TO A

PRINTER OR AND SO FORTH.

**Leo:** OH.

**Ray Maxwell:** NOW IT'S BIT --

**Leo:** SO IT'LL ALWAYS BE

BLACK AND WHITE?

**Ray Maxwell:** THAT'S RIGHT.

AND IT'S ONLY, ONLY ZEROS AND ONES.

**Leo:** LITERALLY BLACK AND WHITE.

**Ray Maxwell:** BLACK AND WHITE.

**Leo:** NO GREY.

**Ray Maxwell:** NO GREY.

BUT IT'S BEEN MISUSED SO MANY TIMES.

**Leo:** RIGHT.

**Ray Maxwell:** AND THEN WINDOWS CAME OUT WITH A BMP  
FORMAT.

**Leo:** RIGHT.

**Ray Maxwell:** AND THEY EXTENDED IT TO INCLUDE RASTER.

**Leo:** OKAY.

**Ray Maxwell:** AND SO IT'S

BEEN HORRIBLY CONFUSED.

**Leo:** SO RASTER MEANS THERE'S

ONE DOT FOR EVERY DOT ON THE

SCREEN OR ON THE PHOTO.

**Ray Maxwell:** RIGHT.

**Leo:** AND THEN THERE IS A, A

CERTAIN NUMBER OF COLOURS THAT,

THAT DOT CAN BE.

**Ray Maxwell:** COLOURS OR GREY SHADES.

**Leo:** RIGHT.

**Ray Maxwell:** RIGHT.

**Leo:** OKAY.

**Ray Maxwell:** BIT MAP OFFICIALLY BACK AT THE BEGINNING.

**Leo:** WHAT'S A VECTOR THEN?

**Ray Maxwell:** A VECTOR IS ALL OF THE THINGS THAT YOU SEE IN A PICTURE ARE DESCRIBED AS MATHEMATIC BEZIER CURVES.

**Leo:** LINES, CURVES.

**Ray Maxwell:** LINES, CURVES.

**Leo:** SQUARES.

**Ray Maxwell:** SQUARES. YEAH.

**Leo:** OKAY.

**Ray Maxwell:** SO NOW WE'VE BROUGHT YOUR PICTURE IN HERE AND WE'RE GONNA --

**Leo:** IS YOU'RE GONNA LOSE SOME QUALITY AREN'T YOU WHEN YOU FOCUS ALL THE LINES?

**Ray Maxwell:** OH YES, YEAH.

**Leo:** YEAH.

**Ray Maxwell:** OH I'M GONNA DO SOMETHING ARTISTIC WITH YOUR, WITH YOUR. SO I'M GONNA GO INTO TRACE AND I'M GONNA GO INTO TRACING OPTIONS AND THEY HAVE A BUNCH OF DEFAULTS HERE AND I'M GONNA START WITH COLOUR 16 DEFAULT. AND SO I'M IN COLOUR MODE.

NOW I'M GONNA JUST BRING THIS  
UP A LITTLE BIT SO WE CAN SEE THIS.  
AND I'M, AND I'M GOING TO BE IN  
THE COLOUR MODE RATHER THAN  
BLACK AND WHITE AND I'M GONNA  
INCREASE THE COLOURS TO IT'LL  
USE 24 COLOURS IN DOING THIS.

**Leo:** OKAY, OKAY.

**Ray Maxwell:** SO IT'S ONLY GONNA HAVE 24 COLOURS IN ITS  
PALETTE.

AND I'M GONNA SAY OKAY LET'S  
TRACE IT AND I'M GONNA TURN ON  
PREVIEW HERE.

**Leo:** SO ESSENTIALLY NOW IT  
HAS TO CREATE A POINT FOR EVERY  
POINT IN THE CURVE, SO YOU'RE  
GONNA SEE A LOT OF DOTS ON THIS THING.

**Ray Maxwell:** RIGHT.

WE'RE GONNA DO ALL KINDS OF  
TRACINGS HERE.

AND I'M GONNA BRING THIS OVER  
HERE TO THE SIDE NOW.

**Leo:** WE'VE LOST SOME COLOUR  
BUT THE PICTURE ITSELF LOOKS PRETTY --

**Ray Maxwell:** YEAH.

**Leo:** MUCH THE SAME.

**Ray Maxwell:** AND NOW IN  
ADDITION TO THIS I'M GONNA SAY  
OKAY I'M HAPPY WITH THAT.

[Both talking at once]

**Ray Maxwell:** SO I'M GONNA SAY TRACE.

**Leo:** RIGHT, OKAY.

**Ray Maxwell:** AND THEN I'M

GONNA GO BACK OUT HERE SO I CAN  
SEE MY MENUS AND I'M GONNA GO  
IN I HAVE TO CONVERT THIS TO A  
LIVE PAINT OBJECT TO DO WHAT I  
WANT TO DO NEXT.  
AND YOU CAN DO THAT IN ONE STEP  
IF YOU HAVE THE PRESETS BUT I'M  
DOING I'M DOING IT IN TWO STEPS HERE --

**Leo:** RIGHT.

**Ray Maxwell:** SO YOU CAN SEE THOSE SETUPS.

**Leo:** YOU CAN SET IT UP BUT  
AT A TIME SO IT DOES IT ALL AUTOMATICALLY.

**Ray Maxwell:** YEAH.

NOW I'M GONNA DO THAT SAME  
SUPER ZOOM IN AS SOON AS WE  
FINISH HERE AND WE'RE GONNA  
HAVE A LOOK AT WHAT WE CREATED  
USING THIS TECHNIQUE.

**Leo:** SO LET'S ZOOM IN.

WELL WE HAVE THE OH YOU SEE?  
LOOK AT THAT.

**Ray Maxwell:** NOW WE HAVE THE  
SAME LITTLE FEATURES.

**Leo:** SO THESE ARE REALLY  
REGIONS MORE THAN THEY ARE  
PIXELS NOW YEAH?

**Ray Maxwell:** RIGHT. NOW IF I GO IN HERE WITH A  
SELECT TOOL I CAN GRAB ONE  
OBJECT IN HERE.

**Leo:** OKAY YOU MIGHT GRAB A,  
A LAYER OF THE CAKE AND ICING HERE.

**Ray Maxwell:** AND EACH OF  
THESE AREAS IS DEFINED BY A CURVE.

**Leo:** WOW THAT'S INTERESTING.

**Ray Maxwell:** YEAH.

**Leo:** SO THIS THE ADVANTAGE  
OF THIS NOW IS YOU CAN SCALE IT  
AS MUCH AS YOU WANT.

**Ray Maxwell:** RIGHT.

[Both talking at once]

**Leo:** YOU CAN MAKE IT AS BIG  
AS YOU WANT --

**Ray Maxwell:** NOW WATCH,  
WATCH THIS, I AM GONNA KEEP  
GOING IN HERE.

**Leo:** LOOK AT THAT.  
ITS SMOOTH, IT'S PERFECTLY SMOOTH.

**Ray Maxwell:** AND I'M NOW AT 6,400 %.  
I COULD PUT THIS N A BILLBOARD.

**Leo:** RIGHT.

**Ray Maxwell:** AND WOULDN'T LOSE A THING.  
SO I CAN SCALE IT TO ANY SIZE  
THAT I WANT.

I CAN PRINT IT OUT.  
IT ISN'T RASTERIZED.

IF YOU SEND THIS TO A PRINTER  
IT ISN'T RASTERIZED UNTIL THE  
FINAL STAGE BECAUSE ALL THINGS  
IN THE IMAGE ARE, ARE DESCRIBED  
BY MATHEMATICAL CURVES.

**Leo:** AND, AND OF COURSE IN  
ORDER TO PRINT IT THEY HAVE TO  
CONVERT IT TO A RASTER --

**Ray Maxwell:** THAT'S RIGHT.

**Leo:** TO DOTS CAUSE OTHERWISE  
IF THE PRINTER DOESN'T KNOW SO

--

[Pop captions up]

**Ray Maxwell:** BUT THEY MAY DO  
THAT AT 6,000 DPI.

**Leo:** RIGHT THEY CAN CONTROL  
THE SIZE AND THEN PRINT IT.

**Ray Maxwell:** RIGHT.  
IT DOESN'T GET CONVERTED UNTIL  
THAT VERY, VERY LAST STAGE.

[Pop captions down]

**Leo:** CAN YOU DO IT WITH ALL  
THE COLOUR THAT, THAT IT WOULD  
NORMALLY HAVE OR DO YOU HAVE TO  
KIND OF LOWER THE COLOUR QUALITY?

**Ray Maxwell:** WELL YOU CAN DO IT.  
THE ONLY THING IS YOU GET SO  
MANY PATHS AND SO FORTH THAT  
THE FILE STARTS --

[Both talking at once]

**Leo:** -- DOTS.

**Ray Maxwell:** IT STARTS TO  
GET AS BIG AS A RASTER FILE.

**Leo:** RIGHT.

**Ray Maxwell:** YEAH.

**Leo:** OH SO THIS IS A SMALLER FILE TOO?

**Ray Maxwell:** OH YES.  
THIS IS A MUCH SMALLER FILE.

**Leo:** AH SEE THAT'S ANOTHER REASON.

**Ray Maxwell:** RIGHT.

**Leo:** COULD YOU NOW YOU COULD  
PROBABLY BRING THIS TO FLASH  
AND NOW THIS COULD BE A FLASH  
OBJECT WHICH YOU CAN THEN LATER ANIMATE.

**Ray Maxwell:** YES RIGHT.

**Leo:** BECAUSE YOU HAVE, YOU  
CAN HAVE HANDLES AND GRAB STUFF.

**Ray Maxwell:** THAT'S RIGHT.

**Leo:** VERY INTERESTING.

**Ray Maxwell:** JUST GOING IN  
AND GET INDIVIDUAL OBJECTS.

**Leo:** IS ILLUSTRATOR THE BEST  
WAY THE ONLY WAY TO DO THIS?

**Ray Maxwell:** WELL THERE USED TO BE FREEHAND.

**Leo:** RIGHT.

**Ray Maxwell:** AND BUT ILLUSTRATOR'S PRETTY MUCH TAKEN  
OVER THE WORLD AND YOU CAN DO  
SOME OF THIS IN PHOTOSHOP.

YOU CAN PUT IN PATHS AND SO FORTH --

**Leo:** BY HAND.

**Ray Maxwell:** BY HAND, BUT IF  
YOU WANT THIS AUTOMATIC TRACING  
IT'S IN ILLUSTRATOR.

**Leo:** RIGHT.

IF YOU ONLY WANTED A LITTLE BIT  
LIKE THE PIECE OF CAKE OR THE  
FORK OR MY NOSE YOU COULD JUST  
TRACE THAT AROUND AND GET THAT  
AS A VECTOR OBJECT.

**Ray Maxwell:** THAT'S RIGHT.

**Leo:** PULL IT OUT OF THE MAIN  
PAINTING AND DO IT THAT WAY.

**Ray Maxwell:** RIGHT AND YOU  
CAN PUT THOSE VECTOR OBJECTS  
BACK INTO PHOTOSHOP.

**Leo:** OH INTERESTING.

**Ray Maxwell:** OKAY ONTO OVER A RASTER IMAGE.

**Leo:** SO THERE YOU GO.

**Ray Maxwell:** AND YOU KEEP IT  
IN A SEPARATE LAYER.

**Leo:** I WAS INCORRECT IN  
CALLING IT A BIT MAP ALTHOUGH  
THAT'S COLOQUIALLY WHAT THEY  
CALL IT NOW.

**Ray Maxwell:** YEAH.

**Leo:** IT'S A RASTER VERSUS A  
VECTOR AND NOW YOU KIND OF KNOW  
THE DIFFERENCE THANKS TO RAY MAXWELL.

[Pop captions up]

**Leo:** YOU CAN SEE RAY'S  
PHOTOS AND LEARN MORE ABOUT HIM  
AT HIS WEBSITE --

[Blank for boards]

**Leo:** THANKS RAY.

**Ray Maxwell:** NO PROBLEM.

**Leo:** THAT'S COOL.  
THAT ACTUALLY DID A BETTER JOB  
THEN I THOUGHT IT WOULD.  
USUALLY THE AUTOMATIC TOOLS  
DON'T DO SUCH A --

**Ray Maxwell:** YEAH NO IT, IT  
DOES AN INCREDIBLE JOB.

**Leo:** THAT'S, THAT'S PRETTY IMPRESSIVE.

**Ray Maxwell:** YEAH IT IS.

**Leo:** SPEAKING OF INCREDIBLE  
JOBS SEAN CARRUTHERS HE'S  
AMAZING WITH HIS MACROLENS.  
HE ZOOMED IN ON SOMETHING YOU'D  
FIND AROUND "THE LAB".  
WHAT IS IT?

WHAT COULD THAT BE?  
BOY I TELL YOU, CAUSE YOU KNOW  
WHEN YOU ZOOM IN THAT CLOSE  
EVERYTHING LOOKS DIFFERENT.  
I HAVE NO IDEA.  
GOT AN IDEA?  
WELL I'LL TELL YOU WHAT.  
WE'LL ZOOM OUT AND FIND OUT  
WHEN "THE LAB" CONTINUES RIGHT AFTER THIS.  
STAY HERE.

[MUSIC]

[Pop captions down]

[Commercial break]

[MUSIC]

[Pop captions up]

**Leo:** WELCOME BACK TO "THE LAB".  
BEFORE THE BREAK WE SHOWED YOU  
THIS WITH AN ON, OFF LIGHT AND A TUBE.  
I DON'T KNOW WHAT IS IT?  
LET'S ZOOM OUT.  
AH IT'S THE WOWWEE ROBOQUAD OF COURSE.

[Pop captions down]

**Leo:** SEAN TOOK THAT WITH HIS  
NEW SUPER-DUPER MACRO ON HIS  
REBEL, CAN REBEL HIS XTI.  
DO YOU LIKE IT AS WELL?

**Sean Carruthers:** I DO.

**Leo:** YEAH YOU KNOW IT'S GOOD  
FOR THOSE MACRO SHOTS BUT I  
LIKE THE CANON.  
IT'S A GREAT CAMERA.

**Sean Carruthers:** IT'S ALL IN THE LENS.  
IT'S ALL ABOUT THE LENS.

**Leo:** IT'S ALL ABOUT THE LENS ISN'T IT?

YEAH IT REALLY IS.

HEY LET'S SAY HI TO KATE AND  
GET ANOTHER CALLER ON HERE.

**Kate:** WE ARE GOING TO BROWN  
MILLS IN NEW JERSEY AND THIS IS MIKE.

**Leo:** HEY MIKE.

[Pop captions up]

**Leo:** HOW'S THINGS IN JOISEY?

**Mike:** HOW YOU DOING HERE LEO?

**Leo:** I'M VERY WELL.

WHAT CAN I DO FOR YOU?

**Mike:** OKAY.

THIS IS A HARD GUY PROBLEM THAT  
I'VE THE FIRST TIME I'VE COME ACROSS IT.  
IT'S A DELL LAPTOP.

**Leo:** YEAH.

**Mike:** AND IT HAS A PASSWORD.  
AS SOON AS YOU BOOT THE  
COMPUTER UP IT ASKS YOU FOR A PASSWORD.

**Leo:** OKAY.

**Mike:** I'VE, I'VE TAKEN THE  
HARD DRIVE IN AND OUT OF THE  
COMPUTER CAUSE I HAVE AN  
ADAPTOR WHERE I CAN TURN IT  
INTO A MASS STORAGE DEVICE.  
IT WON'T LET ME FORMAT IT.

IT WON'T LET ME ERASE IT.

**Leo:** SO EVEN SO IT'S NOT A  
BIOS PASSWORD.

[Pop captions down]

**Leo:** IT'S NOT THE PASSWORD  
YOU GET WHEN YOU TURN ON YOUR COMPUTER.

IT'S ATTACHED TO THE HARD DRIVE ITSELF.

**Mike:** AH THAT'S WHAT I'M THINKING.

**Leo:** YEAH.

**Mike:** BUT IN THE BIOS IT  
GIVES YOU THE OPTION TO SET THE  
HARD DRIVE PASSWORD.

**Leo:** YEAH.

**Mike:** IT SPECIFICALLY SAYS THAT.

**Leo:** WE AH YOU KNOW LATELY  
WE'VE SEEN A NUMBER OF NEW HARD  
DRIVES THAT HAVE BUILT-IN ENCRYPTION.  
THEY ACTUALLY HAVE A CHIP ON  
THEM AND STEVE GIBSON'S TALKED  
ABOUT THAT ON THE SHOW.

BUT THIS ISN'T THAT I DON'T THINK.  
HOW OLD IS THIS SYSTEM?

**Mike:** I MEAN IT'S GOT  
WINDOWS XP HOME ON IT, IT'S --

**Leo:** IT'S A FEW YEARS OLD.

**Mike:** YEAH A FEW YEARS.

**Leo:** SO THOSE, SO THOSE,  
THOSE BUILT IN ENCRYPTION HARD  
DRIVES ARE PRETTY NEW.  
PEOPLE DON'T KNOW THIS BUT THE  
ATA SPEC, THE IDE HARD DRIVE  
SPEC ACTUALLY ALLOWS FOR LOCKING.

AND SO YOU CAN LOCK A, AN ATA,  
AN ATA HARD DRIVE AND IT CAN BE  
WHEN IT'S LOCKED IT'S HARD TO  
UNLOCK IT FRANKLY.

AH YOU CAN'T TAKE IT OUT OF THE  
MACHINE AND PUT IT ON ANOTHER  
MACHINE CAUSE IT'S NOT TIED TO THE BIOS.

IT'S NOT TIED TO THE OPERATING SYSTEM.

IT'S THE HARD DRIVE.

NOW FORTUNATELY THERE IS A  
PROGRAM YOU CAN USE TO UNLOCK IT.

**Mike:** OKAY.

[Pop captions up]

**Leo:** AH YOU CAN GET EITHER  
GET IT FROM ROCKBOX.ORG.  
THEY DISCOVERED THIS WHEN THEY  
WERE WORKING ON HACKING THE ARCOS.

[Pop captions down]

**Leo:** THE ARCOS SYSTEM WHICH  
IS THOSE LET ME ZOOM IN ON THIS  
CAUSE IT'S AWFULLY SMALL.  
THE, THE ARCOS SYSTEM HAS A  
HARD DRIVE THAT'S LOCKED  
APPARENTLY SO THEY WROTE THIS TOOL.  
SO YOU CAN GET THIS DIRECTLY  
FROM ROCKBOX.  
ITS ATAPWD AND DOWNLOAD IT.  
NOW THE PROBLEM WITH THAT IS  
THAT YOU HAVE TO HAVE ANOTHER  
SYSTEM OF COURSE TO RUN THIS ON.  
THERE'S ANOTHER WAY TO DO IT,  
THE ULTIMATE BOOT CD.  
LET ME GO THERE REAL QUICKLY.  
THE ULTIMATE BOOT CD IS A FREE  
CD WHICH PROBABLY EVERYBODY WHO  
USES WINDOWS SHOULD HAVE.  
IT'S A, IT'S A BOOTABLE CD  
WITH, WITH, WITH YOU KNOW  
HUNDREDS OF FREE USEFUL TOOLS  
ON IT NOT, NOT PIRATED.

BUT THESE ARE ALL FREE TOOLS  
LIKE THIS ATPPWD THAT YOU CAN  
RUN AND IT COMES WITH ATAPWD ON IT.  
SO WHAT YOU'LL DO IS YOU'LL,  
YOU'LL JUST GIVE ME JUST A SECOND HERE.  
MY COMPUTER WANTS MY ATTENTION.  
IF I CAN GET TO THIS SITE, I  
DON'T KNOW WHY I CAN'T.  
FOR SOME REASON IT'S SLOW.  
IT'S ULTIMATEBOOTCD.COM.  
YOU, YOU BOOT TO THE ULTIMATE  
BOOT CD AND ONE OF THE THINGS  
ON THE MENU IS ATA PASSWORD  
UNLOCK AND IT SHOULD UNLOCK  
THAT HARD DRIVE OKAY?

**Mike:** NOW CAN I DO THIS OUT  
OF THE LAPTOP OR DO I HAVE TO  
PUT THE HARD DRIVE BACK IN --

**Leo:** WELL IF THE LAPTOP WILL  
BOOT TO A CD THAT'S THE BEST  
PLACE TO DO IT, YES.

**Mike:** OKAY.

**Leo:** AND MOST, MOST  
COMPUTERS WILL BOOT TO A CD.  
SO YOU --

**Mike:** OH YEAH, YEAH IT'LL  
BOOT TO A CD YEAH.

**Leo:** YEAH.

**Mike:** CAUSE I TRIED A NUMBER OF --

**Leo:** SURE THAT'S HOW YOU  
INSTALL WINDOWS.

**Mike:** BOOT DISKS FROM  
BOOT.COM AND SO FORTH AND --

**Leo:** RIGHT,  
ULTIMATEBOOTCD.COM.  
IT'S THE SAME PROGRAM YOU WOULD  
GET FROM ROCKBOX.  
THEY JUST PUT IT ON THERE.

[Pop captions up]

**Mike:** OH OKAY.

**Leo:** BUT THIS IS AS FAR AS I  
KNOW THE ONLY WAY THAT YOU CAN  
UNLOCK THIS DRIVE USING THIS  
ATA LOCKING.

UM YEAH YOU'RE RIGHT IT'S NOT  
VERY COMMONLY USED AND --

[Pop captions down]

**Mike:** AND, AND THERE IS A NOTE.  
I TRIED EVERYTHING.

**Leo:** WELL YEAH.

**Mike:** ATTACHING FILES.

**Leo:** RIGHT.

**Mike:** UM EVERYTHING.

**Leo:** YEAH NO YOU CAN'T, YEAH  
THIS IS THE ONLY WAY I KNOW OF TO DO IT.

NOW THIS WON'T WORK ON THESE  
NEWER DRIVES THAT HAVE THE  
BUILT-IN ENCRYPTION CHIP.

AS FAR AS I KNOW THERE'S NO WAY  
TO GET, THAT'S WHY THEY STARTED  
THEY MOVED TO THIS ENCRYPTION  
CHIPS BECAUSE IT'S EVEN MORE SECURE.

**Mike:** OH.

**Leo:** BUT I DON'T THINK YOU  
HAVE ONE OF THOSE CAUSE THEY'RE  
BRAND NEW AND THEY'RE EXPENSIVE.

THEY COME ON SOME LENOVO  
MACHINES AND STUFF LIKE THAT.  
THESE YOU KNOW THEY'RE, THEY'RE  
I THINK THEY'RE FROM HITACHI.  
THESE THIS IS PROBABLY USING  
THE STANDARD, YOU KNOW ATA'S  
ALWAYS HAD THIS ATA, YOU KNOW  
IT'S RARE THAT YOU SEE SOMEBODY  
USE IT BUT THAT'S PROBABLY WHAT --  
DID YOU BUY THIS DRIVE FROM SOMEBODY?

**Mike:** NO I'M, I'M FIXING IT  
FOR A FAMILY FRIEND.

**Leo:** OKAY.

**Mike:** THAT'S HOW I GOT INTO THIS BECAUSE --

[Both talking at once]

**Leo:** HE PROBABLY USED A  
BOOT, HE PROBABLY --

**Mike:** AND WENT BACK TO SCHOOL AND --

[Both talking at once]

**Leo:** YEAH HE PROBABLY SAW  
THIS BLOCKING CAPABILITY IN THE  
BIOS AND SAID WELL THAT SOUNDS  
LIKE A GOOD IDEA.

**Mike:** RIGHT AND THEN THEY  
FORGOT THE PASSWORD.

**Leo:** THEN THEY FORGOT THE PASSWORD.

[Laughs]

**Leo:** WHICH HAPPENS ALL THE TIME.  
THAT SEEMS LIKE A GOOD IDEA  
UNTIL YOU FORGET THE PASSWORD.  
WELL TRY THIS ANYWAY.  
ULTIMATE BOOT CD, ITS FREE.  
IT'S, IT'S A GOOD THING TO HAVE.

IF YOU'RE THE KIND OF GUY WHICH  
OBVIOUSLY YOU ARE WHO PEOPLE  
COME TO AND SAY CAN YOU FIX MY COMPUTER?  
YOU WANT TO HAVE THIS.

THERE'S A NUMBER I, I HAVE A  
TOOLKIT, I HAVE A SPINRITE.  
JUST A NUMBER OF BOOT CDS SO  
THAT I CAN IMMEDIATELY START  
WORKING ON A COMPUTER EVEN IF  
IT'S NOT BOOTING AND THIS IS  
ONE OF THEM.

**Mike:** YEAH I GOT THAT ONE.  
I GOT, I GOT A BUNCH.

**Leo:** YEAH WELL THEN YOU  
MIGHT EVEN HAVE THIS ONE  
ALREADY YEAH.

**Mike:** I MIGHT.

**Leo:** YEAH, YEAH CAUSE IT'S ONE --

**Mike:** I'M GONNA ASK ONE FAVOUR.

**Leo:** YES SIR.

**Mike:** WE DON'T GET YOU HERE  
IN NEW JERSEY ANYMORE.

**Leo:** NOBODY GETS ME I KNOW.

[Pop captions up]

**Mike:** BUT I MEAN I'VE  
WATCHED YOU FOR YEARS.

**Leo:** I KNOW, I --

**Mike:** ON TV.

I'M ASKING YOU FOR A COPY ONE  
OF YOUR AUTOGRAPHED BOOKS, ANY ONE.

**Leo:** OH I CAN DO THAT FOR YOU.

[Pop captions down]

**Leo:** LET'S HANG ON THE LINE,

WE'RE GONNA --

**Mike:** OH GREAT.

I DON'T KNOW IF THEY HAVE MY  
ADDRESS OR NOT.

I KNOW THEY HAVE MY NUMBER.

**Leo:** YEAH HANG ON THE LINE

WE'LL GET YOUR ADDRESS.

I DON'T NORMALLY DO THIS CAUSE  
I YOU KNOW I HAVEN'T WRITTEN A  
BOOK IN A COUPLE OF YEARS SO MY  
SUPPLIES ARE DWINDLING.

BUT I DO HAVE ONE I'LL SEND  
YOU, I'LL BE GLAD TO SEND YOU.

**Mike:** I'D APPRECIATE THAT  
VERY MUCH LEO AND IT WAS GREAT  
TALKING TO YOU.

I HOPE THIS SOLVES MY PROBLEMS.

**Leo:** NICE TO TALK TO YOU.

I HOPE SO TOO.

LET ME KNOW, SEND US AN EMAIL  
CAUSE I'D LIKE TO KNOW.

THANKS FOR THE CALL.

I APPRECIATE IT.

NOW LET'S TAKE A WALK OVER HERE  
CAUSE SEAN'S GOT A SHINY.

**Sean Carruthers:** A SHINY.

**Leo:** A SHINY, WAIT A MINUTE  
SEAN, WAIT A MINUTE SEAN.

I, I KNOW YOU'RE GETTING OLD.  
YOU'RE PROBABLY YOUR MEMORY'S  
NOT AS GOOD AS IT USED TO BE.

YOU'VE DONE THESE.

**Sean Carruthers:** I KNOW.

**Leo:** YOU'VE DONE THESE.

**Sean Carruthers:** YOU KNOW WHAT?

CALI LEWIS SHOWED US THE

GRIFFIN SPEAKERS --

[Both talking at once]

**Leo:** YEAH I LOVE THEM.

**Sean Carruthers:** AT GRIFFIN TECHNOLOGY.

**Leo:** ISN'T THIS NEAT?

SO THESE ARE WIRELESS.

**Sean Carruthers:** THEY'RE WIRELESS.

**Leo:** THEY'RE, THEY'RE

CHARGING ON HERE AND THEN YOU

PLAY YOUR, PLAY YOUR IPOD.

**Sean Carruthers:** MMM-HMM.

**Leo:** IN FACT I REMEMBER WE

HAD VIDEO OF YOU WALKING OFF

WITH THIS AT SHOWSTOPPERS AND

WALKING HUNDREDS OF FEET AWAY.

**Sean Carruthers:** YEAH.

**Leo:** SO YOU SEE WE REALLY

HAVE SEEN THIS ALREADY.

**Sean Carruthers:** WE HAVE SEEN THEM.

**Leo:** YEAH.

**Sean Carruthers:** BUT HERE'S, HERE'S THE PROBLEM.

YOU'VE GOT THESE SPEAKERS RIGHT NOW.

**Leo:** RIGHT.

**Sean Carruthers:** AND YOU'VE

GOT THEM YOU KNOW SITTING WE'RE

IN ANOTHER ROOM FROM THIS.

**Leo:** SURE, YEAH.

I'M LISTENING TO THE IPOD.

**Sean Carruthers:** YEAH.

**Leo:** YOU KNOW THIS IS IN MY DEN.

I'M LISTENING IN THE KITCHEN  
WHILE I COOK MY PASTA RAGU AND,  
AND, AND RIGHT.

**Sean Carruthers:** WHAT HAPPENS WHEN THE BATTERY DIES?

**Leo:** WELL I HAVE TO GO BACK  
AND PUT THEM BACK ON THE CHARGER.

**Sean Carruthers:** BUT DO YOU THOUGH?

**Leo:** NO, WHAT? THERE'S A --

**Sean Carruthers:** THERE WE HAVE SOMETHING THAT --

**Leo:** WHOA HEY THAT'S A GREAT IDEA!

**Sean Carruthers:** THEY'RE CALLING THESE THE HOTPLATE.

**Leo:** SO NOW I CAN LEAVE THIS  
IN THE KITCHEN KEEP THESE  
CHARGING, LEAVE THIS IN THE DEN  
AND I, I COULD, CAN I EVEN BUY  
MORE CUBES?

I PROBABLY COULD HUH?

[Pop captions up]

**Sean Carruthers:** WELL IN FACT YOU CAN BUY MORE CUBES.

**Leo:** LOOK AT THAT.

**Sean Carruthers:** SO NOW --

**Leo:** SO THIS IS THE EVOLVE ADD-ON SET.

**Sean Carruthers:** YEAH.

**Leo:** DOES IT COME WITH THE  
CUBES AND THE HOTPLATES?

**Sean Carruthers:** WELL YOU CAN BUY THEM SEPARATELY BY  
SPEAKERS --

[Pop captions down]

**Leo:** OR TOGETHER.

**Sean Carruthers:** SEPARATELY BY CHARGING PLATE.

**Leo:** OKAY.

**Sean Carruthers:** OR TOGETHER IN BUNDLES.

**Leo:** OKAY COOL.

**Sean Carruthers:** SO THEY'RE ABOUT 30 BUCKS FOR THE CHARGE  
PLATES EACH AND --

**Leo:** 30?

**Sean Carruthers:** YEAH.

**Leo:** THAT'S NOT BAD.

**Sean Carruthers:** 99 BUCKS PER SPEAKER.

**Leo:** PER SPEAKER?

**Sean Carruthers:** BUT YOU CAN  
GET TWO SPEAKERS AND TWO CHARGE  
PLATES FOR 200 BUCKS.

**Leo:** I LOVE GRIFFIN.  
THIS EVOLVE SYSTEM IS REALLY  
GREAT AND NOW THAT THEY HAVE  
THIS KIND OF SATELLITE THAT  
MAKES IT EVEN MORE ATTRACTIVE.

**Sean Carruthers:** RIGHT AND  
THE NICE THING ABOUT IT IS, IT  
ALL USES RADIO TECHNOLOGY TO,  
TO BROADCAST.  
SO IT'LL ALL BE IN SYNCH NO  
MATTER WHERE YOU ARE.  
IT'S NOT USING DIGITAL AND  
RECONSTRUCTING IT.

**Leo:** AHH.

**Sean Carruthers:** SO YOU CAN  
ADD AS MANY OF THESE AS YOU  
LIKE, SO.

**Leo:** SO IT'S LIKE HAVING A  
LITTLE RADIO STATION IN YOUR HOUSE.

[Pop captions up]

**Sean Carruthers:** EXACTLY.

**Leo:** OH HOW AND IT GOES PRETTY FAR.

**Sean Carruthers:** IT GOES PRETTY FAR.

**Leo:** PROS AND CONS?

**Sean Carruthers:** PROS AND CONS, WELL YOU CAN ADD AS MANY SPEAKERS AS YOU LIKE AND IT'S REALLY EASY.

ALL YOU GOT TO DO IS PUT YOUR NEW SPEAKERS ON THE ORIGINAL SETUP THAT YOU HAVE AND IT'LL AUTOMATICALLY TUNE TO THE FREQUENCY.

AND YOU CAN BUY THEM IN PIECE MEAL FORMAT.

SO YOU CAN BUY THEM AS YOU WANT THEM.

**Leo:** WHAT'S THE NEGATIVES?

**Sean Carruthers:** WELL THE NEGATIVES ARE IS YOU CAN'T CONTROL THE VOLUME INDIVIDUALLY, EVEN IF --

**Leo:** OKAY SO ONLY ONE SET IS PROVIDED.

**Sean Carruthers:** RIGHT.

**Leo:** OKAY.

**Sean Carruthers:** YOU CAN ACTUALLY USE THE REMOTE CONTROL TO, TO CHANGE THE TRACKS FROM A REMOTE SPEAKER.

**Leo:** AH.

**Sean Carruthers:** BUT WHEN YOU GET ANOTHER SPEAKER, BUT YOU CAN'T DO IT ONE BY ONE.

**Leo:** RIGHT.

**Sean Carruthers:** AND IT CAN BE PRETTY EXPENSIVE DOING THESE ONE BY ONE BY ONE LIKE --

[Pop captions down]

**Leo:** SO EVERYBODY'S LISTENING TO THE SAME THING AT THE SAME LEVEL.

**Sean Carruthers:** YEAH.

**Leo:** HEY BUT YEAH YOU KNOW DOING A LITTLE BIT AT A TIME.

**Sean Carruthers:** YEAH.

**Leo:** IT'S LIKE AN INVESTMENT.

**Sean Carruthers:** YEAH SO

WE'RE LOOKING AT \$500 HERE BUT

IF YOU DO IT --

**Leo:** WOW.

[Pop captions down]

**Sean Carruthers:** PIECE MEAL AS YOU SAY.

**Leo:** OKAY.

VERY GOOD, ACTUALLY FOR FOUR

SPEAKERS, FOR TWO, TWO ROOMS --

**Sean Carruthers:** YEAH.

**Leo:** FOUR SPEAKERS, 500 BUCKS.

**Sean Carruthers:** NOT BAD.

**Leo:** NO IT'S NOT BAD.

THANK YOU SEAN.

HEY COMING IN JUST A BIT MY

GOOD FRIEND MERLIN MANN FROM 43FOLDERS.

HE IS GONNA SHOW US HOW TO

IGNORE THE MEATBALLS. WHAT?

DEFAULTS, I'M SORRY WHEN "THE LAB" CONTINUES.

YOU STAY RIGHT HERE.

OH WAIT A MINUTE LET'S DO A QUIZ.

I WANT TO TEST YOUR KNOWLEDGE.

[Blank for boards]

**Leo:** I'LL GIVE YOU A HINT.

IT'S SO BIG THEY HAVE TO HOLD

IT IN LAS VEGAS, THE ONLY PLACE

IN THE WORLD THAT CAN, THAT CAN

SUSTAIN THIS KIND OF SQUARE FOOTAGE.

[Blank for boards]

**Leo:** WHAT'S THE RIGHT ANSWER?

WE'LL TALK ABOUT IT WHEN "THE

LAB" CONTINUES A LITTLE LATER ON.

STAY RIGHT HERE.

[MUSIC]

[Pop captions down]

[Commercial break]

[MUSIC]

**Leo:** WELCOME BACK TO "THE LAB".

LEO LAPORTE HERE, THERE HE IS,  
THE LOVELY, THE TALENTED, THE  
CLEANSHAVEN MERLIN MANN, NEW  
PAPA, HEY MERLIN.

**Merlin Mann:** HOW IT'S GOING LEO?

**Leo:** GREAT TO TALK TO YOU.  
MERLIN IS THE CREATOR AND  
EDITOR AND THE HOST OF  
43FOLDERS.COM WHICH IS A  
FANTASTIC SITE ON PRODUCTIVITY.  
HE SPEAKS EVERYWHERE.  
I SAW YOU JUST SPOKE TO GOOGLE  
ABOUT USING YOUR TIME WISELY.  
I THINK THAT'S COOL.

**Merlin Mann:** YEAH I DON'T  
KNOW HOW THAT HAPPENED.  
I THINK THAT I MISSED SOMETHING SO.

**Leo:** MERLIN'S ALSO THE MOST  
SELF-DEPRECATING GUY I KNOW AND  
A REGULAR ON OUR PODCAST MAC  
BREAK WEEKLY AND WE LOVE HAVING  
HIM ON THAT.  
SO WE'RE GONNA TALK ABOUT I'M  
YOU KNOW EVERY TIME WE'VE HAD I  
TALK TO YOU MERLIN I ASK YOU FOR ADVICE.  
AH I GUESS I'M NOT TAKING YOUR  
ADVICE VERY WELL BECAUSE EVENTS

ARE OVERWHELMING ME STILL.

SO PLEASE HELP.

WHAT CAN I DO TO STREAMLINE MY EXISTENCE?

WE'RE GONNA TALK TODAY ABOUT

MEATBALL SETTINGS.

**Merlin Mann:** YEAH THAT'S RIGHT.

ACTUALLY THAT'S, THAT'S CORRECT.

[Pop captions up]

**Merlin Mann:** I THINK ONE OF  
THE THINGS THAT YOU LEARN AFTER  
EVEN A FEW WEEKS OF USING A  
COMPUTER IS HOW MUCH STUFF YOU  
CAN KIND OF SQUEAK OUT AND SET  
HOWEVER YOU WANT.

**Leo:** RIGHT.

**Merlin Mann:** AND YOU START  
TO LEARN THE KINDS OF THINGS  
THAT YOU WANT TO LEAVE THEM OUT  
AND THE KIND OF THINGS THAT YOU  
WANT TO MAKE A LITTLE BIT MORE  
YOUR OWN.

SO I'M GONNA TALK ABOUT A FEW  
OF THE THINGS THAT KIND OF THE  
PITFALLS YOU WANT TO LOOK FOR  
IN THE DEFAULTS IN OUR LIFE.

[Pop captions down]

**Leo:** SOME OF THE DEFAULT  
SETTINGS ARE NOT OPTIMAL.

SO WHERE DO WE START?

**Merlin Mann:** I'LL TELL YOU,  
I'LL TELL YOU MY FAVOURITE ONE  
RIGHT NOW.

I'VE BEEN THINKING ABOUT THIS

ONE A LOT.

[Pop captions up]

**Merlin Mann:** HAVE YOU EVER  
HAD LIKE A SUPER QUICK QUESTION  
THAT YOU HAD TO ASK SOMEBODY,  
LIKE A 30-SECOND QUESTION?

**Leo:** YES ALL THE TIME.

**Merlin Mann:** LET'S SAY YOU  
WANT TO HAVE A PHONE CALL WITH  
THEM TO ASK THEM A 30-SECOND QUESTION.  
DO YOU HAVE ICAL THERE?  
CAN YOU OPEN ICAL?

[Pop captions down]

**Leo:** I DO. I HAVE ICAL RIGHT IN FRONT OF ME.

**Merlin Mann:** WHY DON'T YOU  
GO AHEAD AND CREATE A QUICK  
EVENT TO ASK THEM THE 30-SECOND QUESTION.

[Pop captions down]

**Leo:** YEAH OKAY, LET'S, LET'S  
CREATE AN EVENT.  
I'M GONNA CALL IT A CONFERENCE CALL.  
I'M GONNA SAY AH CALL --

**Merlin Mann:** SURE.

**Leo:** MERLIN.

**Merlin Mann:** OH GOSH, OH HEY  
SO DOES THAT, THAT GO TO LIKE A  
30-SECOND LENGTH AUTOMATICALLY?

**Leo:** NO AUTOMATICALLY IT'S  
I'LL BE TALKING, I'LL BE  
TALKING TO YOU FROM 11 A.M.  
TILL NOON.

**Merlin Mann:** OKAY THAT WORKS FOR ME.  
WE'LL TALK ABOUT --

[Both talking at once]

**Leo:** THE REST OF MY LIFE.

[Laughs]

**Leo:** SO --

**Merlin Mann:** YEAH BUT IF  
IT'S A HUGE DEAL PROBABLY NOT.  
I MEAN AN HOUR IS A GOOD LENGTH  
OF MEETING FOR A LOT OF PEOPLE.

**Leo:** SO HOW DO I, SO HOW DO  
I SAVE, HOW DO I SAVE, HOW DO I  
CHANGE THIS DEFAULT LENGTH TO  
SOMETHING, WHAT YOU WOULD  
SUGGEST FIRST OF ALL, 15 MINUTES?

**Merlin Mann:** WELL FIRST OF  
ALL I THINK THE BEST WAY TO  
CHANGE IT IS TO CALL APPLE I  
MEAN SO THAT YOU CAN CHANGE IT.

[Both talking at once]

**Leo:** OH AH THERE'S NO  
SETTING HERE?

**Merlin Mann:** IT BEGINS WITH  
A CERTAIN AMOUNT OF MINDFULNESS  
FOR JUST SAYING YOU KNOW IN MY  
LIFE I'M GONNA START SAYING IN  
MY OWN HEAD I'M GONNA ALWAYS  
CHANGE THAT TO 15 MINUTES.

**Leo:** YEAH.

**Merlin Mann:** IF I NEED TO MAKE THAT LONGER I WILL.

**Leo:** I CAN'T BELIEVE THEY  
DON'T HAVE A DEFAULT SETTING IN  
THERE, ALL RIGHT.

**Merlin Mann:** NOW FACE IT LEO  
GMAIL, WHICH IS A VERY POPULAR

OR RATHER GCAL THE GOOGLE  
CALENDAR BIT MAP.

[Both talking at once]

**Leo:** I USE THE GOOGLE CALENDAR.  
IN FACT I LEARNED FROM YOU HOW  
TO A, A PROGRAM CALLED SPANNING  
SYNC THAT WILL SYNCH MY GOOGLE  
CALENDAR WITH MY ICAL.  
SO I USE THAT AND IN FACT I NOW  
HAVE A, A PROGRAM ON MY  
BLACKBERRY THAT AUTOMATICALLY  
ON OVER THE YEARS SYNCHS MY  
GOOGLE CALENDAR SO THAT'S  
REALLY, REALLY HANDY. SO --

**Merlin Mann:** YEAH PLUS IT'S  
GETTING A LOT BETTER AND, AND I  
THINK THAT'S ONE OF THE GOOD  
PARTS OF THE DEFAULT IS WHEN  
YOU CAN PUT SOMETHING IN PLACE  
WHERE YOU DON'T EVEN HAVE TO  
THINK ABOUT IT ANYMORE.

[Both talking at once]

**Leo:** CAN I CHANGE MY DEFAULT  
IN, IN GOOGLE CALENDAR?

**Merlin Mann:** I'M SORRY.

**Leo:** CAN I MAKE THIS A 15- MINUTE MEETING?

[Both talking at once]

**Merlin Mann:** NO YOU CAN'T  
CHANGE THAT, NO YOU CAN'T  
CHANGE THAT EITHER.

[Leo laughing]

**Merlin Mann:** BUT YOU KNOW  
THERE'S CONSISTENCY IN THE -- DEFAULT --

**Leo:** YOU KNOW THAT'S RIDICULOUS.  
THEY REALLY SHOULD SAY YOU KNOW  
HOW LONG IS THE DEFAULT MEETING?  
AND I DON'T, I DON'T ALMOST  
ALWAYS I DON'T WANT TO MEET FOR  
AN HOUR.

I DON'T NEED TO MEET FOR AN HOUR.

**Merlin Mann:** WELL I MEAN  
HERE'S THE, HERE'S THE DIRTY  
LITTLE SECRET.

THE REAL TROUBLE BEHIND THAT IS  
NOT JUST THE FACT THAT ONE AT A  
TIME WE'RE LOSING AN HOUR.  
IT'S THE FACT THAT AN ENTIRE  
GENERATION OF PEOPLE IS GROWING  
UP AROUND THE IDEA THAT WHEN  
YOU CREATE A MEETING IT TAKES  
AN HOUR.

**Leo:** IT MUST, MUST BE AN HOUR.

**Merlin Mann:** AND IN ADDITION  
TO WASTING TIME IT'S A REALLY  
UNHEALTHY HABIT TO ALLOW YOUR,  
YOURSELF TO INTERNALIZE THAT.

**Leo:** SO IF I'M GONNA SAY  
CALL MERLIN I'M GONNA CHANGE  
THAT NOW.  
INSTEAD OF SAYING YOU KNOW I  
YOU COULD CHANGE HOW, HOW THE  
POPUP ON HOW IT REMINDS YOU.  
BUT THEY DON'T I'M NOT, BY THE  
WAY THE DEFAULT ON GOOGLE  
CALENDAR IS ALL DAY NOT ONE  
HOUR, WHICH IS EVEN MORE ANNOYING.

**Merlin Mann:** OH THAT'S A,  
THAT'S A NICE, THAT'S A NICE FIX.

[Both talking at once]

**Leo:** I'M GONNA MEET WITH  
MERLIN ALL DAY!  
ALL RIGHT I'M JUST GONNA MEET  
WITH YOU FOR 15 MINUTES.

**Merlin Mann:** NO I LOVE, NO I  
LOVE HANGING OUT WITH YOU.  
I CAN BLOCK THAT OUT.

**Leo:** ALL DAY!

[Both talking at once]

**Leo:** THAT'S THE DEFAULT.  
ALL RIGHT I'M GONNA SAVE THAT  
OKAY SO --

**Merlin Mann:** THERE'S LOTS OF  
WAYS THAT WE CAN DO THIS.  
I MEAN YOU KNOW THE THING IS I  
THINK THE FIRST STEP IS  
BECOMING AWARE OF IT AND  
STARTING TO REALIZE WHEN YOU'RE  
ALLOWING A DEFAULT TO TAKE OVER  
YOUR LIFE FOR EXAMPLE ON A  
MACINTOSH, WHICH I LOVE.

**Leo:** YEAH.

**Merlin Mann:** WE DON'T CALL  
IT A MAC, EVERYBODY LOVES THE DOCK.  
THE DOCK IS A GREAT WAY TO HAVE  
INSTANT ACCESS TO ALL OF YOUR STUFF.  
BUT AFTER A WHILE IT STARTS TO  
FEEL A LITTLE BIT ALMOST LIKE  
SOME KIND OF A, A PINBALL  
MACHINE OR A ONE-ARMED BANDIT.

AND SO ONE OF THE GREAT THINGS  
YOU CAN DO ON A MAC IF YOU'RE  
IN THE FINDER, I BELIEVE THE  
COMMAND IS JUST OPTION, CONTROL  
OR OPTION APPLE-D CAN MAKE YOUR  
DOCUMENTS APPEAR.

WHICH IS A GREAT WAY TO SAY YOU  
KNOW WHAT?

I JUST I DON'T NEED ALL THIS  
STUFF TAKING MY ATTENTION AWAY.  
I NEED TO BE ABLE TO FOCUS ON  
ONE THING AT A TIME.

**Leo:** SO ARE YOU SAYING TURN  
HIDING ON ARE YOU SAYING --

**Merlin Mann:** THAT'S A,  
THAT'S A CONFUSING WORDING I THINK --

**Leo:** YEAH.

**Merlin Mann:** TO, TO TURN HIDING ON.

**Leo:** SO, SO RIGHT NOW MY DOC  
IS ALWAYS THERE.  
BUT IF I DO CONTROL OPTION-D IT HIDES.  
DID YOU SEE THAT?

AND WHAT IT AND NOW YOU SAY  
WELL WHERE'S MY DOC?

BUT WHEN YOU MOVE THE MOUSE  
DOWN THERE IT, IT'LL COME BACK.

**Merlin Mann:** THAT'S EXACTLY  
RIGHT AND, AND AGAIN I THINK  
IT'S REALLY IMPORTANT TO SAY IT  
WITH THE ESPECIALLY WITH THE MAC.

THIS IS A, THIS IS A -- THAT  
HAS BEEN DESIGNED TO BE  
FEASIBLE AND TO MAKE IT EASY TO

KIND OF GET IT THE WAY THAT YOU WANT.  
SO I THINK ONCE YOU FIND  
YOURSELF USING AN APPLICATION,  
IF THERE'S AN APPLICATION THAT  
YOU'RE USING A LOT.

**Leo:** YEAH.

**Merlin Mann:** I, I THINK IT'S  
A REALLY GOOD HABIT TO GET IN  
THE HABIT OF OPENING UP THE PREFERENCES.

**Leo:** AND SEEING WHAT YOU CAN --

**Merlin Mann:** FINDING OUT THE  
DIFFERENT THINGS THAT YOU CAN CHANGE.

**Leo:** YEAH.

**Merlin Mann:** THINGS LIKE YOU  
CAN SET DEFAULTS FOR HOW YOU  
WANT YOUR FOLDERS TO BE DISPLAYED.  
THAT'LL WORK ON WINDOWS.  
THAT'LL WORK ANYWHERE AND IN A  
CERTAIN WAY --

[Both talking at once]

**Leo:** IN GENERAL DO YOU, DO  
YOU, DO YOU TURN OFF DESKTOP  
ICONS AND HAVE AS LITTLE STUFF  
ON THE, ON THE, ON THE DESKTOP  
ON THE SCREEN AS POSSIBLE?  
I MEAN DO YOU LIKE TO HAVE A  
KIND OF SIMPLE --

**Merlin Mann:** I THINK YOU  
KNOW THE ANSWER TO THAT.

**Leo:** I DO KNOW THE ANSWER.  
THAT'S CALLED A LEADING QUESTION.

**Merlin Mann:** I, I AH, I'M  
VERY EASILY DISTRACTED. WHOA.

[Leo laughing]

[Pop captions up]

**Merlin Mann:** AND, AND IF  
THERE'S ANYTHING THERE I'M  
GONNA BE SITTING THERE AND I'M  
GONNA BE MOVING IT.

[Pop captions down]

**Merlin Mann:** OH AND THEN I'M  
GONNA HAVE TO GO APPLY LABELS TO IT.  
AND I, I THINK, I THINK REALLY  
GETTING, KIND OF GETTING YOUR  
HEAD AROUND THE IDEA OF WHAT  
YOUR OWN PARTICULAR PROBLEMS  
ARE WITH THIS STUFF.  
I'M VERY DISTRACTABLE AND THEN  
FINDING WAYS TO FIX THAT IN  
LITTLE EASY WAYS IS A, IS A  
TERRIFIC TRICK.

**Leo:** I THINK YOU'RE REALLY RIGHT.  
I THINK THE COMPUTER IS A  
NATURAL DISTRACTION MACHINE.  
I KNOW WRITERS WHO'VE REMOVED  
SOLITAIRE FROM THEIR COMPUTER  
CAUSE IT'S JUST TOO TEMPTING  
INSTEAD OF WRITING TO PLAY SOLITAIRE.  
AND YOU, AND IT IS TRUE THAT  
ALMOST ALWAYS YOU CAN CUSTOMIZE  
YOUR MACHINE TO MAKE IT MORE  
USEFUL, MORE OF A TOOL AND LESS DISTRACTING.

**Merlin Mann:** YOU'RE ABSOLUTELY RIGHT.  
AND I MEAN ONE THING I SHOULD  
ALSO MENTION I DON'T THINK I'M  
TALKING HERE MOSTLY ABOUT MAC STUFF.

BUT I THINK WE'RE TALKING ABOUT  
CONCEPTS THAT EXTEND WAY BEYOND  
THIS AND ONTO THE WEB.

I MEAN IF THERE'S ANYTHING MOST  
OF US LEARN AROUND CHRISTMAS TIME --

**Leo:** IS THAT SKYPE DOESN'T WORK.  
HE DISAPPEARED.

WELL WE STILL HEAR YOUR AUDIO  
SO KEEP TALKING. ITS --

**Merlin Mann:** I THINK, I  
THINK A LOT OF US, I THINK A  
LOT OF US LEARNED A LESSON --

[Both talking at once]

**Leo:** YOU KNOW YOU, YOU I SEE  
YOU AND I, I WONDER THIS I SEE  
YOU ON TWITTER ALL THE TIME,  
WHICH IS A KIND OF MICRO  
BLOGGING PLATFORM.  
LET'S JUST SEE, I MEAN MERLIN  
YOU POST FOUR OR FIVE TIMES ON TWITTER.

IS THAT ONE OF THE DISTRACTIONS  
THAT YOU HAVE TO DEAL WITH?  
SEE HERE HE IS HOTDOGLADIES.

AH WHAT DO YOU DO ABOUT THINGS  
LIKE I MEAN YOU'RE ALWAYS  
WRITING ON HERE RIGHT?

**Merlin Mann:** DISTRACTION?

I'M, I'M SURE I DON'T KNOW WHAT  
YOU MEAN. LET'S --

[Both talking at once]

**Leo:** I MEAN THIS, THIS  
HOTDOGLADIES, HE'S, HE'S LET'S SEE.  
YOU'VE, YOU'VE ALREADY TODAY

POSTED ON TWITTER IT LOOKS LIKE  
AT LEAST A DOZEN TIMES.

**Merlin Mann:** YES BUT IT WAS  
A MINDFUL, A MINDFUL DISTRACTION.  
I KNEW EXACTLY WHAT I WAS DOING, I --

**Leo:** SO DO YOU SUGGEST  
TURNING OFF THINGS LIKE  
FACEBOOK AND TWITTER WHEN  
YOU'RE TRYING TO GET SOMETHING DONE?

**Merlin Mann:** I TOTALLY AGREE.

**Leo:** YEAH.

**Merlin Mann:** AND I THINK, I  
THINK LIKE I WAS THINKING ABOUT  
FACEBOOK I MEAN YOU DON'T WANT  
TO WAKE UP ONE DAY AND SUDDENLY  
DISCOVER THAT YOU KNOW NOW THIS  
HAS BEEN FIXED SINCE, SINCE  
THIS HAPPENED.

BUT A LOT OF PEOPLE WOKE UP ONE  
DAY TO DISCOVER THE STUFF THEY  
WERE BUYING ON DIFFERENT SITES  
WAS SUDDENLY SHOWING UP ON A  
FRIENDS LIST ON FACEBOOK.

AND SO REALLY BEING ABLE TO DO --

**Leo:** THAT'S WEIRD.

**Merlin Mann:** YOU'RE SORT OF  
INCUMBANT UPON YOU AS A  
COMPUTER USER INCREASINGLY TO  
GO OUT AND KIND OF BE YOUR OWN  
SORT OF DEFENSE ATTORNEY WITH,  
WITH STUFF, STUFF IN YOUR LIFE  
AND THAT INCLUDES YOUR TIME AND ATTENTION.

**Leo:** YEAH, NO I, I THINK

YOU'RE ABSOLUTELY RIGHT.  
YOU HAVE TO KIND OF PUSH THINGS  
AWAY SO THAT YOU CAN GET SOME STUFF DONE.  
NOW I JUST WANT TO LET ME SEE  
IF I CAN FIND A, A PICTURE OF  
ELEANOR ON HERE.

HERE, HERE IS THIS IS --

**Merlin Mann:** ARE YOU SAYING  
MY DAUGHTER'S BECOME A  
DISTRACTION FOR ME?

**Leo:** YOU HAVE THE, YES YOU  
HAVE THE CUTEST BABY.  
THAT IS ELEANOR LOOKING AT THE  
COMPUTER APPARENTLY, MERLIN AND  
HIS WIFE MADELINE.

AND ELEANOR IS, IS THAT, THAT  
IS THE CUTEST BABY IN THE WORLD  
I JUST WANT TO SAY.

MERLIN'S PICTURES --

**Merlin Mann:** YOU'RE TOO NICE.  
YOU KNOW I MEAN I'M SURE CANADA  
IS JUST WALL TO WALL ADORABLE KIDS.  
THEY'RE A, THEY'RE A WONDERFUL PEOPLE.

**Leo:** MAYBE.  
BUT CAN THEY DO THIS?

[MUSIC]

**Leo:** SHE'S, SHE'S WINKING.  
SHE WOW, I'VE NEVER SEEN A BABY  
WINK IN MY LIFE.

**Merlin Mann:** I WISH MY WIFE  
WAS HERE TO SEE THIS.

[Leo laughing]

[Both talking at once]

**Merlin Mann:** I'M GONNA START CRYING.

**Leo:** HEY IT'S GREAT TO TALK TO YOU.  
MERLIN MANN IS AT 43FOLDERS.COM.

[Pop captions up]

**Leo:** AND HE ALSO HAS THE  
FUNNIEST SITE, ONE OF THE  
FUNNIEST SITES I'VE EVER BEEN TO.  
IT'S LISTS OF FIVE.

IT'S THE NUMBER FIVE, I-V-E-  
S.COM AND THERE'S NEW FIVES UP  
THERE ALL THE TIME.

[Pop captions down]

**Leo:** AND MERLIN THAT'S  
ANOTHER DISTRACTION.  
YOU GOT TO STOP DOING THAT  
CAUSE IT'S DISTRACTING ME.

**Merlin Mann:** I'M SORRY LEO.  
I'D NEVER, I APOLOGIZE FOR THAT.

**Leo:** MERLIN GREAT TO TALK TO YOU.

[Pop captions up]

**Leo:** CATCH HIM AT  
43FOLDERS.COM AND ON MAC BREAK  
WEEKLY EVERY TUESDAY ON THE  
TWIT NETWORK.  
MORE OF YOUR CALLS COMING UP AS  
"THE LAB" CONTINUES RIGHT AFTER THIS.  
STAY HERE.

[MUSIC]

[Pop captions down]

[Commercial break]

[MUSIC]

**Kate:** HEY WELCOME BACK TO  
"THE LAB WITH LEO".

I'M KATE ABRAHAM AND MY TIP OF THE DAY IS FOR ALL YOU FACEBOOK USERS OUT THERE WHO WANT TO KNOW WHO'S ONLINE WHEN SO YOU CAN GET INSTANT MESSAGING INVOLVED. SO IT'S FACEBOOK.COM.

THE, THE APP IS ACTUALLY CALLED WHO'S ONLINE FOR FACEBOOK.

[Pop captions up]

**Kate:** WHAT YOU DO IS ONCE IT'S INSTALLED YOU GET THE LITTLE ICON PHOTO.

SO FOR INSTANCE I KNOW SEAN IS ONLINE RIGHT NOW AND ALSO MY FRIENDS HERE WHO HAVE BEEN ONLINE. AND WHAT HAPPENS IS THE LONGER THEY'RE ACTUALLY OFFLINE THE GREYER THEY BECOME.

[Pop captions down]

**Kate:** SO FOR INSTANCE I KNOW THAT THIS GENTLEMAN HERE HASN'T BEEN ONLINE FOR A WHILE.

**Leo:** WIPEOUT.

**Kate:** SO THAT IS WHO'S ONLINE FOR FACEBOOK AT FACEBOOK.COM FORWARD SLASH APPS.

[Pop captions up]

**Leo:** SO YOU FADE OUT IF YOU DON'T GO --

[Laughs]

**Kate:** EXACTLY.

**Leo:** IF YOU DON'T GO YOU SLOWLY FADE.

**Kate:** IT'S LIKE STALKING ON FACEBOOK.

**Leo:** I'LL HAVE TO TRY THAT.

**Kate:** YEAH IT'S GREAT AND  
YOU CAN UPDATE IT AND OBVIOUSLY  
YOU REFRESH IT.

[Pop captions down]

**Leo:** YEAH.

**Kate:** SO IT'S A VERY COOL LOOK.

**Leo:** THAT'S A, THAT'S A  
REALLY, THAT'S A GREAT THING.

**Kate:** YEAH.

**Leo:** I SHOULD CHECK AND SEE  
IF MY FRIENDS ARE ONLINE OR NOT.

**Kate:** YEAH.

**Leo:** YOU KNOW I HAVE ALMOST  
5,000 FACEBOOK FRIENDS.

**Kate:** THAT'S YOUR LIMIT ISN'T IT?

**Leo:** YEAH.

SO IF YOU WANT TO BE MY FRIEND  
YOU'D BETTER HURRY TO MY FACEBOOK --

**Kate:** OR WE'LL START COLOURING YOU OUT.

**Leo:** BECAUSE YEAH I WELL I  
DON'T KNOW WHAT HAPPENS THEN.  
I GUESS IF SOMEBODY ASKS YOU  
AFTER I DON'T KNOW.

**Kate:** YOU HAVE TO REMOVE TO  
PUT ON I THINK.

**Leo:** YEAH.

IT'S LIKE A PARKING GARAGE  
THAT'S SO FULL THAT YOU CAN'T  
GET IN UNTIL SOMEBODY LEAVES.

**Kate:** ABSOLUTELY.  
BUMP SOMEONE AND MOVE SOMEONE IN.

**Leo:** BUT I COULD USE THAT SO

IF SOMEBODY GETS REALLY FADED  
OUT THEN I COULD BUMP EM.

**Kate:** YEAH.

THE ONLY THING IS THE MORE  
OFTEN YOU TOUCH YOUR APP --

**Leo:** YEAH --

[Both talking at once]

**Kate:** YOU'LL JUST BE  
SCROLLING DOWN NOW.

**Leo:** IT JUST TAKES, IT TAKES  
LIKE AN HOUR TO BUILD THE --

**Kate:** ABSOLUTELY.

**Leo:** BUILD THE IMAGE, YEAH.

**Kate:** ABSOLUTELY.

**Leo:** ALL RIGHT LET'S GET  
ANOTHER CALLER ON HERE.

**Kate:** FANTASTIC.

WE ARE GOING TO SYDNEY NEW  
SOUTH WALES AND WE HAVE JOHN.

**Leo:** JOHN HOW ARE YOU?

**John:** GOOD LEO.

HOW YOU DOING MATE?

**Leo:** WHAT, WHAT CAN WE DO  
FOR YOU TODAY?

**John:** WELL LEO I KNOW SOME  
OF THE PEOPLE IN THE -- WHO'VE  
JUST GOT -- BIG CONCRETE WALLS  
IN THE PLACE AND THE --  
SYSTEMATICALLY -- DOESN'T WANT  
TO WORK TOO WELL ANYMORE.  
AND I'VE HEARD A BIT ABOUT  
THOSE NETWORK SYSTEMS YOU CAN  
GET WHICH PLUG IN THROUGH THE

YOUR ELECTRICAL WIRING IN YOUR --

**Leo:** RIGHT.

**John:** IN YOUR HOUSE.

AND THIS I DON'T, I DON'T KNOW

A LOT ABOUT THEM.

I WAS JUST WONDERING UM ARE

THEY ANY GOOD?

AND YOU KNOW HOW WELL DO THEY

WORK AND ARE THERE, ARE THERE

ANY THAT YOU'D RECOMMEND?

**Leo:** THERE'S A LONG THIS IS

CALLED POWERLINE NETWORKING AND

THERE'S A LONG HISTORY OF

POWERLINE NETWORKING.

THE PROBLEM I JUST NOTICED THE

PICTURE, GREAT PICTURE BY THE WAY.

I LOVE THAT.

UM IT WHEN THEY FIRST

INTRODUCED IT MAYBE A DECADE

AGO I WAS VERY SKEPTICAL.

[Pop captions down]

**Leo:** THE IDEA IS THAT YOU

USE THE WIRING IN YOUR WALLS

YOU'VE ALREADY WIRED YOUR HOUSE

FOR POWER, FOR ELECTRICITY.

SO EVERY ROOM HAS A PLUG.

IF YOU COULD ONLY SEND NETWORK

TRAFFIC OVER THAT WOULDN'T THAT

BE COOL?

BUT THERE ARE ALL SORTS OF ISSUES.

I MEAN YOU'VE GOT POWER ON IT

FOR ONE THING.

YOU HAVE TO KIND OF ISOLATE THE

DATA AND THE POWER.

THAT POWER PUTS A LOT OF HUM IN THERE.

THERE'S AN, AN ADDITIONAL ISSUE  
IS THAT YOU ACTUALLY CAN BE  
TURNING YOUR POWERLINES INTO A  
BROADCAST STATION, BROADCASTING  
YOUR DATA.

SO THERE WERE A LOT OF THINGS  
THAT THEY HAD TO, HAD TO SOLVE.  
THEY ACTUALLY HAVE TO A GREAT  
DEGREE SOLVED THEM AND  
POWERLINE NETWORKING WORKS  
PRETTY WELL.

THE IDEA IS YOU'LL HAVE A BASE  
STATION THAT PLUGS INTO THE  
WALL, ITS CALLED HOME PNA.

[Pop captions up]

**Leo:** AND, AND THEN YOU CAN  
USE EVERY, EVERYWHERE YOU WANT  
TO USE THIS POWERLINE  
NETWORKING YOU'VE GOT TO PLUG  
INTO A, A THE WALL PLUG A  
SPECIAL UNIT.

[Pop captions down]

**Leo:** SO YOU'VE GOT TO BUY A  
UNIT FOR EVERY, FOR EVERY  
COMPUTER THAT YOU WANT TO  
CONNECT TO THE WALL PLUG.  
NOW I HAVE TO SAY I, I'M YOU  
KNOW I'M EMBARRASSED TO SAY I  
HAVEN'T TRIED POWERLINE NETWORKING.  
BUT I KNOW SEAN KNOWS A LITTLE  
BIT ABOUT IT SO I'M GONNA ASK

HIM ABOUT HOME PNA.

WHEN I FIRST SAW IT AND TRIED

IT I WAS UNIMPRESSED.

IT DID NOT WORK.

BUT I'M TOLD NOW IT WORKS

PRETTY WELL.

**Sean Carruthers:** IT'S --

**Leo:** YOU KNOW ASSUMING YOU

DON'T HAVE FOR INSTANCE BIG

JUNCTION BOXES IN BETWEEN TWO

DIFFERENT ROOMS OR A LOT OF SPLICES.

**Sean Carruthers:** RIGHT.

**Leo:** WHAT HAVE YOU, HAVE YOU

TRIED IT?

WHAT KIND OF SPEEDS DO YOU GET?

THAT, THAT KIND OF THING.

**Sean Carruthers:** WELL MY, MY

EXPERIENCE WAS PRETTY MUCH THE

SAME AS YOURS.

WHEN THEY FIRST CAME OUT YOU'D

GET SOMETHING LIKE 14 MEGABITS

AND IT, IT DIDN'T WORK REALLY

ALL THAT WELL.

**Leo:** SLOW, UNRELIABLE YEAH.

**Sean Carruthers:** THE BATCH

IS ACTUALLY QUITE GOOD.

IN FACT SLING, SLINGMEDIA HAS

BROUGHT OUT SOMETHING CALLED

THE SLINGBOX TURBO WHICH IS

ACTUALLY ESSENTIALLY HOME

NETWORKING PRODUCTS --

**Leo:** OH INTERESTING.

**Sean Carruthers:** TO TRANSFER

YOUR, YOUR VIDEO SIGNAL FROM  
ONE END OF THE HOUSE TO THE OTHER.

**Leo:** OH THAT'S A GOOD IDEA.

**Sean Carruthers:** SO AT THIS  
POINT RIGHT NOW IT'S, IT'S GOOD  
ENOUGH THAT YOU CAN ACTUALLY  
STREAM VIDEO THROUGH YOUR HOME  
YOU KNOW ELECTRICAL SYSTEM  
WHICH THAT, THAT SAYS IT RIGHT THERE.  
IT CAN GET, IT CAN BE PRETTY INTENSIVE.

**Leo:** SO HOW MUCH BANDWIDTH  
DO YOU THINK YOU'RE GETTING ON  
THESE THINGS?

**Sean Carruthers:** THEY'RE  
SAYING ABOUT 200 MEGABITS PER  
SECOND AT THIS POINT.

**Leo:** WOW WELL THAT'S VERY FAST.

**Sean Carruthers:** SO IT'S,  
IT'S ACTUALLY BETTER THAN MOST --

[Both talking at once]

**Leo:** YEAH.

**Sean Carruthers:** -- 10, 100.

**Leo:** YEAH.

LINUX SELLS THESE.  
THEY'RE FAIRLY INEXPENSIVE.  
HERE'S THE LINUX PLK200 KIT  
AND YOU CAN SEE YOU GET A  
COUPLE OF ADAPTORS.  
YOU GET THE BASE STATION AND  
YOU'LL HAVE TO BUY MORE  
ADAPTORS AS YOU WANT TO ADD  
THINGS TO IT.  
IT HAS ENCRYPTION WHICH IS

IMPORTANT CAUSE AGAIN YOU'RE  
BELIEVE IT OR NOT BROADCASTING.  
SO SOMEBODY COULD YOU KNOW PICK  
UP THE SIGNAL OF YOUR DATA.  
THIS IS A REVIEW ON CNET IN  
WHICH THEY GIVE IT A, A PRETTY  
HIGH REVIEW.  
I WOULD SUGGEST READING THE  
REVIEWS ON THE UNITS YOU'RE  
THINKING ABOUT BEFORE YOU BUY  
AND I WOULD ESPECIALLY SUGGEST  
MAYBE GOING TO AMAZON.  
I, I DON'T KNOW IF YOU HAVE AN  
AMAZON I GUESS YOU MUST HAVE AN  
AMAZON AUSTRALIA AND, AND GO  
THERE AND READ WHAT PEOPLE WHO  
HAVE BOUGHT THESE KITS WHAT  
THEIR EXPERIENCE HAS BEEN.  
I FIND THOSE TO BE REALLY,  
REALLY USEFUL.  
CNET GIVES IT A 7, 6 OUT OF 10.  
I IT IS THEY POINT OUT A LITTLE  
BIT MORE NET, A LITTLE BIT MORE EXPENSIVE.  
A LITTLE BIT MORE BULKY.  
BUT THE POINT IS IT NOW WORKS  
AND BECAUSE YOU HAVE YOUR  
WIRING ALL THROUGHOUT YOUR  
HOUSE I MEAN THAT'S, THAT'S,  
THAT'S REALLY GREAT.  
I MEAN YOU DON'T HAVE TO STRING WIRES.  
IT'S NOT WIRELESS SO YOU  
ELIMINATE SOME OF THOSE ISSUES  
WITH WI-FI.

**Sean Carruthers:** YEAH THE  
ONE WARNING I GIVE IS SOMETHING  
I DISCOVERED TESTING THIS A  
WHILE BACK.

**Leo:** MMM-HMM.

**Sean Carruthers:** IT'S IF YOU  
PLUG ONE YOU CAN ACTUALLY PICK  
UP THE SIGNAL FROM YOUR  
NEIGHBOUR'S HOUSE.

**Leo:** RIGHT.

**Sean Carruthers:** POTENTIALLY.

SO THAT'S WHY --

**Leo:** SO THAT'S WHY THAT  
ENCRYPTION BECOMES VERY IMPORTANT.

**Sean Carruthers:** YEAH ESPECIALLY CAUSE TRANSFORMERS  
EVERY SO OFTEN ON THE  
POWERLINES BETWEEN HOUSES.  
BUT IF YOU'RE BETWEEN THOSE  
THEN PEOPLE NEXT DOOR CAN SNIFF  
YOUR, SNIFF YOUR PACKETS.

**Leo:** EXCELLENT, EXCELLENT POINT.  
SO AND WHEN, WHEN THEY SAY DATA  
RATES TO 200 MEGABITS THAT'S OF  
COURSE THE NOMINAL MAXIMUM.

**Sean Carruthers:** RIGHT AND THAT'LL BE SHARED.

**Leo:** YOUR, YOUR RESULTS MAY VARY.

**Sean Carruthers:** YEAH.

**Leo:** ALL RIGHT LET'S TAKE A  
WALK, THANK YOU SEAN.  
I APPRECIATE IT.

LET'S TAKE A WALK ON OVER TO  
RYAN YEWELL FOR A JEWEL!

**Ryan Yewell:** HERE WE GO.

YES SIR WE ARE ON WINDOWS AND  
WE ARE DOING GEOGRAPHY, THE  
PROGRAM'S CALLED SETERRA.

**Leo:** SETERRA.

[Pop captions up]

**Ryan Yewell:** NOW WHAT IT,  
IT'S BASICALLY ALLOWS YOU TO  
TEST YOUR KNOWLEDGE OF  
COUNTRIES, CAPITALS, PROVINCES.

**Leo:** OH NEAT.

**Ryan Yewell:** YOU CAN CHOOSE DIFFERENT AREAS.  
WE'VE GOT NORTH AMERICA, SOUTH AMERICA.  
SO LET'S JUST CHECK OUT ASIA  
CAPITALS AND I'M GOING TO DO  
HORRIBLY BECAUSE GEOGRAPHY WAS  
NOT MY STRONG POINT.

[Pop captions down]

**Ryan Yewell:** SO IT COMES UP  
AND NOW WE HAVE TO FIND HANOI.  
NOW I HAVE NO IDEA WHERE --

**Leo:** THAT'S IN VIETNAM.  
NOW COME ON YOU GO DOWN, DOWN, DOWN.

[Both talking at once]

**Ryan Yewell:** DOWN, DOWN, DOWN.

**Leo:** UP, UP, UP.

[Both talking at once]

**Ryan Yewell:** UP, UP, UP OH GEEZ.

**Leo:** OH THERE YOU GO.

**Ryan Yewell:** MAYBE RIGHT THERE?

**Leo:** NO, NO NORTHERN,  
NORTHERN --

[Both talking at once]

**Ryan Yewell:** OH.

**Leo:** NORTHERN, NORTHERN VIETNAM.

**Ryan Yewell:** NORTHERN, NORTHERN VIETNAM --

**Leo:** THERE YOU GO.

**Ryan Yewell:** THERE YOU GO.

**Leo:** THERE YOU GO.

**Ryan Yewell:** AND IF YOU GET  
TOO MANY WRONG IT'LL ACTUALLY  
START FINDING OUT.

SO IF I START, SEE, SEE THIS  
ONE RIGHT HERE?

IT STARTS FLASHING.

SO IT STARTS GIVING YOU HINTS  
IF YOU'RE GETTING THINGS WRONG.

THERE'S LITTLE QUIZZES SO YOU  
CAN, WE CAN GO OUT HERE EXIT  
AND WE DO LITTLE QUIZZES OF  
LIKE FLAGS OF THE WORLD EVEN.

SO IT'S BASICALLY JUST FOR, FOR  
PEOPLE THAT WANT TO LIKE --

**Leo:** THAT'S GREAT.

**Ryan Yewell:** TEST THEMSELVES  
IN GEOGRAPHY.

**Leo:** YEAH.

**Ryan Yewell:** FLAGS, COUNTRIES, PROVINCES.

**Leo:** IT'D BE GOOD FOR KIDS  
WHO WANT TO STUDY GEOGRAPHY.

**Ryan Yewell:** YEAH.

**Leo:** THAT'S GREAT.

**Ryan Yewell:** IT'S FOR WINDOWS ONLY.

**Leo:** AND FREE.

**Ryan Yewell:** ITS CALLED SETERRA.  
IT'S ABSOLUTELY FREE, OF COURSE.

**Leo:** I LIKE THAT.

**Ryan Yewell:** YES.

**Leo:** OF COURSE IT'S FREE.

ALL OF YEWELL'S JEWELS ARE FREE.

**Ryan Yewell:** YES.

**Leo:** WHERE DO WE FIND THOSE?

[Pop captions up]

**Ryan Yewell:** LABWITHLEO.COM

FREE FILES YEWELL'S JEWELS

YOU'LL FIND THIS MANY MORE.

**Leo:** 160 PLUS GREAT FREE --

**Ryan Yewell:** SOMETHING LIKE THAT.

**Leo:** PROGRAMS AND TIPS.

**Ryan Yewell:** YEAH.

**Leo:** THANK YOU SO MUCH.

**Ryan Yewell:** YOU'RE WELCOME.

**Leo:** DO YOU KNOW WHAT THE

CAPITAL OF CHINA IS?

**Ryan Yewell:** AH THAT WOULD BE HMM --

**Leo:** BEIJING YEAH.

**Ryan Yewell:** BEIJING, SEE

I'M NOT GOOD AT GEOGRAPHY.

I WASN'T A GEOGRAPHY --

**Leo:** WE'RE GONNA GO TO CHINA

IN JUST A BIT.

KRIS KRUG IS HERE.

**Ryan Yewell:** OKAY.

**Leo:** HE IS GONNA TALK ABOUT

USING TECHNOLOGY TO BRIDGE THE

CULTURAL AND POLITICAL GAPS

BETWEEN THE WEST AND THE EAST.

IT SHOULD BE FASCINATING.

**Ryan Yewell:** VERY FASCINATING.

**Leo:** BUT FIRST ONE MORE

CHANCE TO ANSWER OUR QUICK QUIZ  
QUESTION OF THE DAY.

DID YOU GET THIS ONE?

DO YOU KNOW THE ANSWER?

[Blank for boards]

**Leo:** AT THE CES SHOW, THE  
BIG SUPER ELECTRONICS SHOW THIS  
YEAR JANUARY 2008 IN VEGAS?

HMM WHAT THAT, HOW BIG COULD  
THAT NUMBER BE?

I'LL TELL YOU WHAT.

GO TO THE WEBSITE.

WE'LL TALK ABOUT IT WHEN "THE  
LAB" CONTINUES.

[MUSIC]

[Pop captions down]

[Commercial break]

[MUSIC]

[Pop captions up]

**Leo:** WELCOME BACK TO "THE LAB".  
BEFORE THE BREAK WE ASKED YOU  
HOW BIG WAS CES?

IT WAS BIG BABY.

[Blank for boards]

**Leo:** 2007 BOOTHS.

[Pop captions down]

**Leo:** SEVERAL HUNDRED  
FOOTBALL FIELDS.

I MEAN THIS THING IS HUGE,  
REALLY TOO BIG TO COVER EVEN  
ANYMORE THESE DAYS.

KRIS KRUG IS HERE.

HE'S THE PRESIDENT OF RAINCITY

STUDIOS AND IT'S GREAT TO HAVE  
YOU BACK.

**Kris Krug:** GOOD TO SEE YOU.

**Leo:** AND IT'S AN APTLY NAMED  
VANCOUVER BASED WEB DESIGN FIRM.  
BUT YOU GUYS ALSO DO BUSINESS IN CHINA.

**Kris Krug:** THAT'S RIGHT.

**Leo:** THAT'S KIND OF INTERESTING.  
HOW DID THAT HAPPEN AND WHY?

[Pop captions up]

**Kris Krug:** WELL WE OPENED AN  
OFFICE IN CHINA SIX MONTHS AGO  
AFTER BEING THERE ABOUT FIVE  
TIMES OVER THE LAST COUPLE OF YEARS.  
AND WE SEE A SMALL R REVOLUTION  
TAKING PLACE OVER THERE WITH  
MARKETS OPENING UP TO OPEN  
SOURCE TECHNOLOGY AND, AND  
INNOVATION TAKING PLACE ON THE  
INTERNET THAT'S COMING FROM  
THERE AS OPPOSED TO STRICTLY  
FROM NORTH AMERICA AND CANADA  
LIKE, LIKE WE'VE SEEN BEFORE SO.

**Leo:** IT KIND OF MAKES SENSE  
THAT COMMUNIST NATION WOULD  
LOVE OPEN SOURCE SOFTWARE.  
I DON'T KNOW WHY.  
BUT IT JUST SEEMS LIKE A NATURAL.  
UM YOU KNOW THEY DON'T HAVE THE  
CAPITALIST INFRASTRUCTURE FOR A  
BIG SOFTWARE INDUSTRY PROBABLY RIGHT?

[Pop captions down]

**Kris Krug:** WELL TRADITIONALLY THE COMPANIES

THAT WERE EXPANDING INTO  
MARKETS LIKE ASIA AND STUFF  
WERE BIG CORPORATIONS WITH A  
LOT OF MONEY AND, AND, AND --

**Leo:** MULTINATIONALS YEAH?

**Kris Krug:** YEAH.

**Leo:** YEAH.

**Kris Krug:** AND AN, AN  
INTEREST IN TRYING TO YOU KNOW  
EXPLOIT THAT, THAT NEW MARKET  
AND BRING AS MUCH MONEY OUT.  
WHAT YOU'RE SEEING NOW IS A  
MOVE FROM PROJECTS LIKE DRUPAL  
AND WORDPRESS AND OTHER OPEN  
SOURCE PROJECTS AND JUST KIND  
OF INITIATIVES AS OPPOSED TO CORPORATE LED.

**Leo:** SEE TO ME THAT MAKES A  
LOT OF SENSE ESPECIALLY IN A  
COUNTRY WHERE THEY DON'T HAVE A  
LOT OF CAPITAL.

THEY DON'T HAVE A LOT OF MONEY.

**Kris Krug:** YEAH.

**Leo:** WELL I'LL GIVE YOU AN EXAMPLE.  
I KNOW THAT THEY WERE  
DEVELOPING THEIR OWN VERSION OF LINUX.  
THAT THEY WANTED TO HAVE KIND  
OF A, A, A DEFAULT OPERATING  
SYSTEM, CHINESE OPERATING SYSTEM.  
THAT MAKES A LOT OF SENSE.

**Kris Krug:** AND THESE TOOLS  
HAVE A, HAVE THE ABILITY TO  
REALLY OPEN UP AND POWER PEOPLE  
TO SHARE IDEAS.

**Leo:** RIGHT.

**Kris Krug:** AND TO GET THEIR VOICE OUT THERE IN A PLACE WHERE THAT TYPE OF STUFF TRADITIONALLY HAS BEEN SOMETHING REALLY DIFFICULT TO DO AND POWER'S HELD BY A FEW PEOPLE. THIS, THIS REALLY OPENS THINGS UP FOR PEOPLE TO SHARE IDEAS.

**Leo:** OH IT'S GREAT FOR THAT, YEAH.

**Kris Krug:** COMMUNICATE, CREATE THEIR OWN CONTENT, CONNECT WITH THE REST OF THE WORLD.

**Leo:** DID YOU GET THE SENSE THAT THE CHINESE GOVERNMENT MIGHT BE A LITTLE NERVOUS ABOUT THAT KIND OF OPENING UP?

**Kris Krug:** I THINK THEY'RE VERY NERVOUS ABOUT IT. I MEAN YOU STILL HAVE TO DO VERY PRAGMATIC THINGS LIKE REGISTER SERVERS THAT GO ONLINE IN CHINA.

SO EVERY SERVER THAT IS RUN BY SOMEONE AN ISP OR HOME HAS A, HAS A CERTIFICATE. THE, THE GOVERNMENT KNOWS THAT YOU HAVE IT OUT THERE. TO, TO HOLD MEETINGS LIKE THE BAR CAMPS AND THE PHP USERS GROUP AND THE LINUX GROUPS THAT PEOPLE PARTICIPATE IN YOU HAVE TO HAVE A LITTLE CERTIFICATE.

**Leo:** OH INTERESTING.

**Kris Krug:** THAT SAYS THEY  
KNOW YOU'RE MEETING.  
THEY KNOW WHOSE IN CHARGE.  
SO THERE'S STILL A  
PROTECTIONIST CULTURE.

**Leo:** YEAH.

**Kris Krug:** I THINK THERE'S SOME FEAR.

**Leo:** DO THE PARTICIPANTS THE  
CHINESE PARTICIPANTS FEEL LIKE  
THEY'RE BEING SUBVERSIVE OR DO  
THEY FEEL LIKE WE'RE JUST  
TRYING TO GET MORE KNOWLEDGE  
ABOUT WHAT'S GOING ON IN THE WORLD?

**Kris Krug:** I DON'T THINK  
THEY FEEL LIKE THEY'RE BEING  
SUBVERSIVE IN A POLITICAL SENSE  
OF THE WORD.

**Leo:** RIGHT.

**Kris Krug:** I THINK THAT THEY  
FEEL THAT THEY'RE WORKING  
AROUND DIFFICULTIES OR ROUTING  
AROUND PROBLEM AREAS.

**Leo:** RIGHT.

**Kris Krug:** KIND OF LIKE THE INTERNET WORKS.

**Leo:** RIGHT.

**Kris Krug:** SO I THINK THEY  
FEEL EMPOWERED MAYBE MORE SO  
THAN SUBVERSIVE.

**Leo:** THAT'S A GOOD WORD YEAH.  
ALTHOUGH I HAVE TO SAY I FEEL  
SUBVERSIVE WHEN I USE OPEN SOURCE.  
I FEEL LIKE IT'S, IT'S YOU KNOW

IT'S TRYING TO OPEN UP THE  
WORLD A LITTLE BIT.  
MAYBE IT IS MORE SUBVERSIVE TO  
USE OPEN SOURCE IN A CAPITALIST  
ECONOMY THEN IT IS TO USE IN,  
IN A CENTRALIZED COMMUNIST ECONOMY.  
SO WHAT, WHAT IS YOUR SENSE OF  
THE, THE SKILL LEVEL IN, IN CHINA?  
ARE THESE PEOPLE GOOD DEVELOPERS?  
DO THEY --

**Kris Krug:** OH YEAH THE SKILL  
LEVEL'S VERY HIGH.

**Leo:** IS IT?

**Kris Krug:** YOU SEE A REALLY  
HIGH GROUP OF MATHEMATICIANS  
AND COMPUTER SCIENTISTS.

**Leo:** MMM-HMM.

**Kris Krug:** THESE ARE PEOPLE  
WHO ARE TRADITIONALLY USING  
THEIR POWERS FOR QUOTE, UNQUOTE  
EVIL HACKING AND YOU KNOW  
WORKING AROUND THE SYSTEM.  
BUT NOW WITH KIND OF THE  
PROLIFERATION OF OPEN SOURCE  
SOFTWARE AND SOME OF THE THINGS  
THAT ARE GOING ON OVER THERE  
YOU SEE A LOT OF THESE PEOPLE  
COMING TO THE TABLE AND USING  
THEIR, THEIR SKILLS FOR, FOR  
GOOD THINGS, FOR --

**Leo:** OH INTERESTING.  
DO THEY PARTICIPATE IN THE OPEN  
SOURCE COMMUNITY?

I MEAN ARE THEY STARTING TO  
GIVE BACK TO THE OPEN SOURCE  
COMMUNITY?

**Kris Krug:** YEAH DEFINITELY.

THERE'S A SITE THAT WE  
PARTICIPATE IN CALLED  
DRUPALCHINA.ORG.

IT'S A CHINESE CHARACTER VERSION --

**Leo:** THAT'S GREAT.

**Kris Krug:** OF DRUPAL.ORG.

YOU'LL SEE A LOT OF CHINESE  
MEMBERS AND CONTRIBUTORS THERE.  
IN FACT, IN FACT ALL OF THEM ARE.

**Leo:** IS A LOT OF THE WORK  
INITIALLY LOCALIZATION JUST  
MAKING IT CHINESE?

**Kris Krug:** YEAH.

A LOT OF THAT WORK HAS BEEN  
DONE ALREADY IN THE CASE OF DRUPAL.

[Both talking at once]

**Leo:** I WOULD IMAGINE.

**Kris Krug:** BUT I KNOW WORD,  
WORD, WORDPRESS IS DOING THE  
SAME TYPE OF THING.

THERE ARE LOCAL USERS GROUPS.  
THERE'S A, THERE'S A MOZILLA  
FOUNDATION IN CHINA NOW.

**Leo:** THAT'S SO GREAT.

[Pop captions up]

**Kris Krug:** SO PEOPLE ARE  
STARTING TO SELF-ORGANIZE AND  
GET TOGETHER AND REALIZE,  
REALLY KIND OF TAKE ADVANTAGE

OF THE TOOLS THAT ARE, THAT ARE  
OUT THERE.

**Leo:** HOW HARD IS IT TO GET  
SOMETHING LIKE DRUPAL OR  
MOZILLA TO SUPPORT THE CHINESE  
LANGUAGE?

[Pop captions down]

**Leo:** I MEAN IT'S, IT'S NOT,  
IT'S A DIFFERENT, IT'S A VERY  
DIFFERENT KIND OF STRUCTURE  
ISN'T IT?

**Kris Krug:** TECHICALLY IT'S,  
IT'S NOT THAT DIFFICULT.

**Leo:** YEAH.

**Kris Krug:** IT REQUIRES  
SUPPORTING SOME OF THE NEWER  
STANDARDS LIKE UTF8 --

**Leo:** YEAH.

**Kris Krug:** AND UNICODE.

**Leo:** YEAH.

**Kris Krug:** AS OPPOSED TO  
SOME OF THE OLDER STANDARDS.

**Leo:** YEAH.

**Kris Krug:** BUT MOST OF THE  
KIND OF BEST PRACTICES INDUSTRY  
LEADING SOFTWARE DOES, DOES  
SUPPORT NON-STANDARD CHARACTER  
ENGLISH CHARACTER LANGUAGES --

**Leo:** THAT'S GREAT.

**Kris Krug:** LIKE RUSSIAN AND PUNJABI.

**Leo:** THEY, THEY MUST USE A  
SIMPLIFIED CHINESE CAUSE  
THERE'S HUNDREDS OF THOUSANDS

OF CHARACTERS --

**Kris Krug:** YEAH THAT'S RIGHT.

**Leo:** IN THE CHINESE LANGUAGE.

**Kris Krug:** YEAH.

**Leo:** SO THEY USE A SIMPLIFIED CHINESE.

SO YOU'VE ACTUALLY HAD BAR CAMPS?

YOU'VE HAD DRUPAL CAMPS?

YOU'VE HAD THESE KIND OF

UNCONFERENCES IN CHINA?

**Kris Krug:** THAT'S RIGHT AND

WE'VE HELD, WE'VE HELD FOUR BAR CAMPS.

BAR CAMPS ARE JUST THESE OPEN

SOURCE UNCONFERENCES WHERE

THERE'S NO SPEAKER AND THERE'S

NO CROWD BUT EVERYONE'S A PARTICIPANT.

**Leo:** I LOVE BAR CAMPS YEAH.

**Kris Krug:** EVERYONE PARTICIPATES.

**Leo:** YEAH I LOVE THAT IDEA YEAH.

**Kris Krug:** SO EVERYONE'S

EXPECTED TO COME TALK ABOUT

SOMETHING THEIR PASSION.

**Leo:** RIGHT.

**Kris Krug:** ABOUT IN FACT

SEVERAL OF THOSE THERE THEY'VE

GONE OVER REALLY WELL.

WE HAD 200 PEOPLE AT THE LAST.

OH YEAH I HAVE A LITTLE PICTURE

HERE FROM OUR LAST ONE IN SHANGHAI.

**Leo:** SHOW ME THAT PICTURE.

**Kris Krug:** THIS IS MYSELF

AND ROBERT SCALES WITH PROBABLY

60 OR SO OF THE PEOPLE WHO CAME

TO BAR CAMP SHANGHAI.

**Leo:** ISN'T THAT GREAT?

**Kris Krug:** AND UM --

**Leo:** THEY'RE, THEY'RE,  
THEY'RE ALL YOUNG AREN'T THEY?  
IT'S, IT'S STUDENTS.

**Kris Krug:** YEAH IT'S A VERY,  
IT'S A VERY YOUNG THING.  
I WENT TO THE, THERE WAS A  
BLOGGER CALLING IN CHINA THAT I  
WENT TO AND TALKED TO ABOUT  
OPEN SOURCE AND IT WAS YOU KNOW  
500 PEOPLE ALL, ALL IN  
UNIVERSITY AGE.

**Leo:** LOOK THERE'S A GUY WITH  
FIREFOX T-SHIRT.  
OH LOOK AT THAT.  
THAT'S PROBABLY CONSIDERED  
PRETTY HIP TO BE IN CHINA YOU KNOW.

**Kris Krug:** OH VERY MUCH SO.

**Leo:** THAT'S REALLY NEAT.  
SO IS ROBERT STAYING THERE?  
IS HE LIVING IN, IN CHINA NOW?

**Kris Krug:** YEAH CEO RAINCITY  
STUDIOS, ROBERT SCALES MOVED TO  
SHANGHAI LAST OCTOBER.

**Leo:** THAT'S GREAT.

**Kris Krug:** AND WE'VE OPENED  
UP AN OFFICE THERE.  
WE'RE NINE FOLKS THERE NOW  
INCLUDING SCALES.  
SO EIGHT, EIGHT LOCAL CHINESE PEOPLE.

**Leo:** THAT'S GREAT.

**Kris Krug:** ALL OF THEM SPEAK

ENGLISH, BILINGUAL.

ALL OF THEM ARE PHP DEVELOPERS  
AND HAVE BEEN EXPOSED TO OPEN  
SOURCE THROUGH THE KIND OF  
EFFORTS THAT WE'RE WORKING ON  
OVER THERE SO.

**Leo:** NOW I KNOW YOU FOR A  
LONG TIME WERE USING DRUPAL TO  
KIND OF MAKE IT ACCESSIBLE TO  
NON-PROFITS AND COMMUNITIES AND  
SO FORTH.

IS THAT THE KIND OF THING  
THAT'S GOING ON CHINA AS WELL?

**Kris Krug:** YEAH WE'RE DOING  
A COUPLE OF THINGS OVER THERE.  
WE HAVE OUR DRUPAL HOSTED  
SERVICE WHICH IS --

**Leo:** RIGHT.

**Kris Krug:** SORT OF YOU KNOW  
20 BUCKS A MONTH.  
PEOPLE CAN COME AND GET ACCESS  
TO ALL THE POWER THAT'S ON THE  
DRUPAL SITE.

**Leo:** THAT'S SO NEAT.

**Kris Krug:** UM WE'RE ALSO  
DOING SOME CONSULTING OVER THERE.

**Leo:** RIGHT.

**Kris Krug:** WE'RE THERE'S A  
BIG EX-PAT ONLINE COMMUNITY  
THAT WE'RE REBUILDING.

**Leo:** RIGHT.

**Kris Krug:** CALLED THE BEIJINGER.COM.

**Leo:** THAT'S NEAT.

**Kris Krug:** PEOPLE THAT ARE  
USING DRUPAL.

[Pop captions up]

[Blank for boards]

**Leo:** IS THE PLACE TO GO.

KRIS KRUG IS THE PRESIDENT.

HE'S ALSO A GREAT PHOTOGRAPHER,

GO LOOK AT HIS FLICKR SITE,

WONDERFUL IMAGES AND I JUST

THINK IT'S VERY EXCITING HOW

WE'RE KIND OF LIKE WATER.

YOU KNOW IT OPEN SOURCE SPREADS

EVERYWHERE AND NATURALLY AND

JUST AND MAKES FLOWERS GROW.

[Pop captions down]

**Leo:** IT'S WONDERFUL.

THANKS KRIS, I APPRECIATE IT.

**Kris Krug:** THANKS A LOT LEO.

**Leo:** A FINAL WORD COMING UP

RIGHT AFTER THIS.

STAY RIGHT HERE.

[MUSIC]

[Commercial break]

[MUSIC]

[Pop captions up]

**Leo:** WE'RE OUT OF TIME.

**Kate:** IT ALWAYS HAPPENS.

**Leo:** IT GOES SO FAST.

BUT WE'RE SO GLAD YOU WERE HERE.

WE HOPE YOU FOUND SOMETHING OF

INTEREST AND --

[Pop captions down]

**Kate:** INDEED.

**Leo:** AND LEARNED SOMETHING  
AND I HOPE YOU'LL WANT TO COME  
BACK, NOT ONLY TO WATCH THE  
SHOW BUT TO OUR WEBSITE BECAUSE  
WE'VE GOT LOTS OF GREAT STUFF THERE.

**Kate:** YEAH WE HAVE.

[Pop captions up]

**Kate:** THE ENTIRE SHOW  
BASICALLY IS ONLINE WITH THE  
SHOWNOTES, THE TECH QUESTIONS ARE THERE.  
SO IF YOU WANT TO SUBMIT TECH  
QUESTIONS FILL IN THIS FORM AND  
WE'LL GET YOU ON THE SHOW.

**Leo:** LABWITHLEO.COM.

**Kate:** YES IT IS.

**Leo:** KATE'S GOT A BLOG THERE TOO.  
YOU CAN READ ALL OF HER, HER LIFE STORY.

**Kate:** AND WATCH.

**Leo:** HUH?

**Kate:** YOU CAN WATCH ONLINE AS WELL.

**Leo:** YOU CAN WATCH?

**Kate:** YEAH.

**Leo:** I LIKE TO WATCH. YEAH.

**Kate:** MANY PEOPLE DO.

[Both laughing]

**Leo:** ALL RIGHT THE PURPLE  
SHOW'S OVER.

**Kate:** OKAY WE'RE DONE.

**Leo:** TOMORROW ORANGE.

**Kate:** INDEED WE CAN DO THAT.

[Pop captions down]

**Leo:** WE'LL BE BACK IN A BIT,  
I HOPE YOU WILL TOO.

SEE YOU LATER.

BYE-BYE.

**Kate:** BYE-BYE.

[MUSIC]

[Coins bouncing]

[MUSIC]

[Pop captions up quickly]

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[Pop captions down]