

Enhancing NASA Fiche Records with Links to Online Content

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Depository Library Conference, 17 October 2007,
Arlington, VA

Abstract

It's painful to see thousands of fiche records in the OPAC that you know full well are online, but the records do not so indicate. This talk shows how the University of Denver enhanced NASA fiche records by adding 24,000 links to NASA Technical Report Server content in relatively little time. Instructions will be provided for libraries wishing to do provide similar access.

University of Denver Transition

- June, 2007 – 74% Selective Depository
- Oct., 2007 – 50% Selective.
- We deselected all but 10 items with tangible distribution
- We subscribed to Marcive's *Documents Without Shelves* for 100% of electronic items.
- We are now a fully electronic depository.

NASA Disconnect

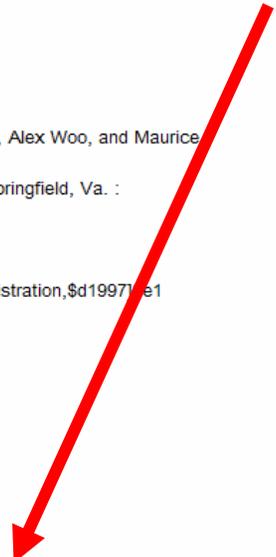
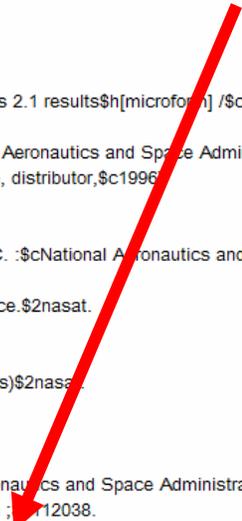
- We had over 24,000 records for microfiche with no online links
- Yet, most of these links were accessible in NTRS

Desired Result: URLs in Records with Online Content

=LDR 01703nam 22003857a 4500
=001 39777137
=003 OCoLC
=008 980831s1996\\dcu\\b\\f000\\lengld
=035 \\\$a(GPO)97100389
=037 \\\$a19970009364\$bNASA
=040 \\\$aGPO\$cGPO\$dDLC\$dMvI\$dMvI
=049 \\\$aDVP2
=074 \\\$a0830-D (MF)
=086 0\\\$aNAS 1.15:112038
=099 17\\\$aNAS 1.15:112038
=100 1\\\$aSaphir, William.
=245 14\\\$aThe NAS Parallel Benchmarks 2.1 results\$h[microform] /\$cWilliam Saphir, Alex Woo, and Maurice Yarrow.
=260 \\\$a[Washington, D.C. :\$bNational Aeronautics and Space Administration ;\$aSpringfield, Va. :\$bNational Technical Information Service, distributor,\$c1996]
=300 \\\$a1 v.
=500 \\\$aShipping list no.: 98-0810-M.
=533 \\\$aMicrofiche.\$b[Washington, D.C. :\$cNational Aeronautics and Space Administration,\$d1997]e1 microfiche.\$f(NASA-TM ; 112038).
=650 17\\\$aComputer systems performance.\$2nasat.
=650 17\\\$aCray computers.\$2nasat.
=650 17\\\$aParallel computers.\$2nasat.
=650 17\\\$aParallel processing (Computers)\$2nasat.
=650 17\\\$aSupercomputers.\$2nasat.
=700 1\\\$aWoo, Alex.
=700 1\\\$aYarrow, Maurice.
=710 1\\\$aUnited States.\$bNational Aeronautics and Space Administration.
=830 10\\\$aNASA technical memorandum ; 112038.
=856 41\$u<http://library.du.edu/findit/peak/redirect.cfm?LinkURL=http://hdl.handle.net/2060/19970009364>
\$zAccess online version
=907 \\\$a.b25255678\$b05-03-07\$c01-21-00
=998 \\\$ain\$apm\$b01-21-00\$cm\$da\$e-\$feng\$gdcu\$h4\$i1
=945 \\\$g1\$h0\$j0\$k0\$lpmdfc\$o-\$p{dollar}0.00\$q \$r-\$s-\$t0\$u0\$v0\$w0\$x0\$y.i25700376z01-21-00
=945 \\\$g1\$h0\$j0\$k0\$linter\$o-\$p{dollar}0.00\$q \$r \$sj\$t0\$u0\$v0\$w0\$x0\$y.i38098817sz05-03-07

URL Tracking
Prefix

URL to NTRS



<http://library.du.edu/findit/peak/redirect.cfm?LinkURL=http://hdl.handle.net/2060/19970009364>

Steps Involved

- Isolate records needing URLs in ILS
- Export relevant fields (control no., OCLC no., SuDocs no., title – 245\$a)
- Import into Access
- Make modifications to data in Access (remove colon from SuDocs no.)
- Download MARC records from ILS (in MARC communication format)
- Convert from MARC communication format to MarcEdit format with MarkEdit.
- Lookup URLs using link from Access to NTRS
- Write URLs to MARC records using NoteTab Pro
- Import records back into ILS

Tools Required

- Microsoft Access
- MarcEdit – free download:
<http://oregonstate.edu/~reese/marcedit/>
- Notetab – free download:
<http://www.notetab.com/>

Fields in the Access Database

ID:	SuDocs:	Title:	SuDocsOut:	NTRS:	Peak:	URL:	URLout:	OCLC:
1	NAS 1.15:101888	Space Shuttle Mission STS-34 pre	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19900001666	http://hdl.handle.net/2060/19900001666	23161621
2	NAS 1.15:88232	Losses in fountain-effect pumps	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19870002532	http://hdl.handle.net/2060/19870002532	23174687
3	NAS 1.15:100418	The NASA integrated test facility a	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19880011793	http://hdl.handle.net/2060/19880011793	23175212
4	NAS 1.26:4352	Description and evaluation of an int	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19910011842	http://hdl.handle.net/2060/19910011842	31861416
5	NAS 1.15:103805	IMPAC--an Integrated Methodology	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19910010809	http://hdl.handle.net/2060/19910010809	31875089
6	NAS 1.15:206579	Design and predictions for a high-a	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19990049398	http://hdl.handle.net/2060/19990049398	42633679
7	NAS 1.15:207685	Measure of damping of compo	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19990052895	http://hdl.handle.net/2060/19990052895	42633666
8	NAS 1.15:208541	Debris ice TPS assessment and ir	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19990052656	http://hdl.handle.net/2060/19990052656	42634028
9	NAS 1.15:208763	The development of the CONDUIT :	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19990051006	http://hdl.handle.net/2060/19990051006	42634030
10	NAS 1.15:208767	The thin oil film equation	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19990047906	http://hdl.handle.net/2060/19990047906	42634006
11	NAS 1.15:208829	Development and performance of th	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19990049233	http://hdl.handle.net/2060/19990049233	42634023
12	NAS 1.15:208835	Rare earth doped yttrium aluminu	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.denver.edu/	hdl.handle.net/2060/19990047775	http://hdl.handle.net/2060/19990047775	42634044

1. Access ID number (for database integrity)
2. SuDocs number
3. Title (subfield \$a only)
4. Link to NTRS by SuDocs number
5. Link to NTRS by title
6. Link to University of Denver local catalog record by SuDocs number
7. URL to handle or to search result screen with multiple docs. Column 7 is where the target URL is pasted; Column 8 tests this URL.
8. URL to NTRS for testing purposes
9. OCLC number from MARC record

Discovering Online Content

ID:	SuDocs:	Title:	SuDocsOut:	NTRS:	Peak:	URL:	URLout:	OCLC:
▶ 1	NAS 1.15:101888	Space Shuttle Mission STS-34 pre	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.dtic.mil/	'hdl.handle.net/2060/19900001666	http://hdl.handle.net/2060/19900001666	23161621
2	NAS 1.15:88232	Losses in fountain-effect pumps	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.dtic.mil/	'hdl.handle.net/2060/19870002532	http://hdl.handle.net/2060/19870002532	23174687
3	NAS 1.15:100418	The NASA integrated test facility a	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.dtic.mil/	'hdl.handle.net/2060/19880011793	http://hdl.handle.net/2060/19880011793	23175212
4	NAS 1.26:4352	Description and evaluation of an int	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.dtic.mil/	'hdl.handle.net/2060/19910011842	http://hdl.handle.net/2060/19910011842	31861416
5	NAS 1.15:103805	IMPAC--an Integrated Methodology	http://ntrs.nasa.gov/	http://ntrs.nasa.gov/	http://catalog.dtic.mil/	'hdl.handle.net/2060/19910010809	http://hdl.handle.net/2060/19910010809	31875089

NASA TECHNICAL REPORTS SERVER (NTRS)

Search NTRS

Search Field: All

Search Term: "NAS 1.15101888" [X]

Results: 1 record(s) matching your query.

Sorted by: Date Added To NTRS in Descending order

Shuttle Atlantis to deploy Galileo probe toward Jupiter

Abstract: The objectives of Space Shuttle Mission STS-34 are described along with major flight activities, prelaunch and launch operations, trajectory sequence of events, and landing and post-landing operations. The primary objective ...

NASA Center: NASA (non Center Specific)

Publication Year: 1989

Added to NTRS: 2005-08-25

Accession Number: 90N10982; Document ID: 19900001666; Report Number: N NASA-NEWS-RELEASE-89-151, NASA-TM-101888, P89-10151

Document Details:

Title:	Shuttle Atlantis to deploy Galileo probe toward Jupiter
Author(s):	NONE
Abstract:	The objectives of Space Shuttle Mission STS-34 are described along with major flight activities, prelaunch and launch operations, trajectory sequence of events, and landing and post-landing operations. The primary objective of STS-34 is to deploy the Galileo planetary exploration spacecraft into low earth orbit. Following deployment, Galileo will be propelled on a trajectory, known as Venus-Earth-Earth Gravity Assist (VEEGA), by an inertial upper stage (IUS). The objectives of the Galileo mission are to study the chemical composition, state, and dynamics of the Jovian atmosphere and satellites, and investigate the structure and physical dynamics of the Jovian magnetosphere. Secondary STS-34 payloads include the Shuttle Solar Backscatter Ultraviolet (SSBUV) instrument the Mesoscale Lightning Experiment (MLE) and various other payloads involving polymer morphology, the effects of microgravity on plant growth hormone, and the growth of ice crystals.
NASA Center:	NASA (non Center Specific)
Publication Date:	Oct 1, 1989
Document Source:	CASI
Download Document:	View PDF File
Document ID:	19900001666

This is a "handle" URL

<http://hdl.handle.net/2060/19900001666>

When there are Several Parts

Author [Lalli, Vincent R.](#)
Title **Software design improvements. Part 1-2 [microform] / Vincent R. Lalli, Michael H. Packard, Tom Ziemianski.**
Publ Info [Washington, D.C. : National Aeronautics and Space Administration ; Springfield, Va. : National Technical Information Service, distributor. 1997]

The links below are for electronic versions of this publication
[Access online version](#)

LOCATION	CALL #
Microfiche Docs	NAS 1.15:107402/PT.1-2
Internet	NAS 1.15:107402/PT.1-2
Description	2 v.
Series	IEEE ; 155NO897-5000, Part 1. NASA technical memorandum ; 107402, Part 1. NASA technical memorandum ; 107402.
Note(S)	Shipping list no.: 98-0784-M (pt.1), 98-0844-M (pt.2)
Contents	Pt.1. Software benefits and limitations -- inspection process.
Note(S)	Microfiche. [Washington, D.C. : National Aeronautics and Space Administration, distributor. 1997].

Search NTRS

TERM SEARCH OPTIONS

Select Search Field *

All

Find Results With

All of the words

Enter Search Term

within returned results

Search Tips:

- ▶ Use only the fields with * to search NDX collection.
- ▶ Enclose terms in double quotation marks ("") to search for exact phrases, ie: "space shuttle". NOTE: Commas and dashes are removed from search term by search engine.
- ▶ Select Reset Search button to start a new search. See [Help](#) for more tips.



SEARCH NTRS

Search Criteria:

- ◆ Search Field: All > Results : All > Search Term: "Software design improvements." [X]

Sort results by: [NASA Center](#) | [Date Added to NTRS](#) | [Publication Year](#)

There are a total of 2 record(s) matching your query.
 Sorted by: **Date Added To NTRS in Descending order**

Software Design Improvements

Author(s): Lalli, Vincent R.; Packard, Michael H.; Ziemianski, Tom

Abstract: Computer hardware and associated software have been used for many years to process accounting information, to analyze test data and to perform engineering analysis. Now computers and software also control everything from ...

NASA Center: Glenn Research Center

Publication Year: 1997

Added to NTRS: 2005-08-25

Accession Number: 97N18301; Document ID: 19970015395; Report Number: E-10609-Pt-1, IEEE-155NO897-5000-Pt-1, NAS 1.15107402-Pt-1, NASA-TM-107402-Pt-1

Software Design Improvements

Author(s): Lalli, Vincent R.; Packard, Michael H.; Ziemianski, Tom

Abstract: ... 'If it is not safe, say so' has become our motto. This paper goes over methods that have been used by NASA to make **software design improvements** by focusing on software quality and the ...

NASA Center: Glenn Research Center

Publication Year: 1997

Added to NTRS: 2005-08-25

Accession Number: 97N17151; Document ID: 19970013223; Report Number: E-10635, IEEE-155NO897-5000, NAS 1.15107402-Pt2, NASA-TM107402-Pt2

Before Running Macro

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=003 OCoLC	39777151	http://hdl.handle.net/2060/19970009334
=008 980831s1996\\dc\\b\\f000\\eng\\d	39777137	http://hdl.handle.net/2060/19970009364
=035 \\\$a(GPO)97100389	39777155	http://hdl.handle.net/2060/19970009341
=037 \\\$a19970009364\$bNASA	39777165	http://hdl.handle.net/2060/19970009365
=040 \\\$aGPO\$cGPO\$dLDC\$dMvI\$dMvI	39777177	http://hdl.handle.net/2060/19970004792
=049 \\\$aDVP2	39777210	http://hdl.handle.net/2060/19970009643
=074 \\\$a0830-D (MF)	39777217	http://hdl.handle.net/2060/19970008003
=086 0\\\$aNAS 1.15:112038	39777222	http://hdl.handle.net/2060/19970010607
=099 \\\$aNAS 1.15:112038	39777232	http://hdl.handle.net/2060/19970016814
=100 1\\\$aSaphir, William.	39777235	http://hdl.handle.net/2060/19970015346
=245 14\$aThe NAS Parallel Benchmarks 2.1 results\$h[microform] /\$cWilliam Saphir, Alex Woo, and Maurice Yarrow.	39777239	http://hdl.handle.net/2060/19970027074
=260 \\\$a[Washington, D.C. :\$bNational Aeronautics and Space Administration ;\$aSpringfield, Va. :\$bNational Technical Information Service, distributor,\$c1996]	39777248	http://hdl.handle.net/2060/19970026958
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=533 \\\$aMicrofiche.\$b[Washington, D.C. :\$cNational Aeronautics and Space Administration,\$d1997]\$e microfiche.\$f(NASA-TM ; 112038).	39777276	http://hdl.handle.net/2060/19970008122
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=650 \\\$aCray computers.\$2nasat.	39777345	http://ntrs.nasa.gov/search.jsp?N=0&Ntk=all&Ntx=mode%20matchall1&Ntt=%22NAS%201.15107402%22
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=650 \\\$aSupercomputers.\$2nasat.	39777373	http://hdl.handle.net/2060/19960041235
=700 1\\\$aWoo, Alex.	39777435	http://hdl.handle.net/2060/19970013289
=700 1\\\$aYarrow, Maurice.	39777440	http://hdl.handle.net/2060/19970009815
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=830 0\\\$aNASA technical memorandum ;\$v112038.	39777452	http://hdl.handle.net/2060/19970026598
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=998 \\\$ain\$apm\$b01-21-00\$c\$m\$da\$e-\$feng\$gdcu\$h4\$11	39777484	http://hdl.handle.net/2060/19970026236
=945 \\\$gl\$h0\$j0\$ko\$lpmdfcSo-\$p(dollar)0.00\$q \$r -\$s-\$t0\$u0\$v0\$w0\$x0\$y.125700376\$z01-21-00		
=945 \\\$gl\$h0\$j0\$ko\$lpmdfcSo-\$p(dollar)0.00\$q \$r -\$s-\$t0\$u0\$v0\$w0\$x0\$y.138098817\$z05-03-07		

MARC Records from ILS

OCLC No. & URLs from Access

After Running Macro

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=001 39777137
=003 OCoLC
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=538 \\$aAccess online version: http://hdl.handle.net/2060/19970009364
=008 980831s1996\\dcu\\b\\f000\\0eng\\d
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=037 \\$a19970009364$bNASA
=040 \\$aGPO$cGPO$dDLC$dMvI$dMvI
=049 \\$aDVP2
=074 \\$a0830-D (MF)
=086 0\\$aNAS 1.15:112038
=099 \\7$aNAS 1.15:112038
=100 1\\$aSaphir, William.
=245 14$aThe NAS Parallel Benchmarks 2.1 results$h[microform] /$cWilliam Saphir, Alex Woo, and Maurice Yarrow.
=260 \\$a[Washington, D.C. :$bNational Aeronautics and Space Administration ;$aSpringfield, Va. :$bNational Technical Information Service, distributor,$c1996]
=300 \\$a1 v.
=500 \\$aShipping list no.: 98-0810-M.
=533 \\$aMicrofiche.$b[Washington, D.C. :$cNational Aeronautics and Space Administration,$d1997]$e1 microfiche.$f(NASA-TM ; 112038).
=650 \\7$aComputer systems performance.$2nasat.
=650 \\7$aCray computers.$2nasat.
=650 \\7$aParallel computers.$2nasat.
=650 \\7$aParallel processing (Computers)$2nasat.
=650 \\7$aSupercomputers.$2nasat.
=700 1\\$aWoo, Alex.
=700 1\\$aYarrow, Maurice.
=710 1\\$aUnited States.$bNational Aeronautics and Space Administration.
=830 \\0$aNASA technical memorandum ;$v112038.
=907 \\$a.b25255678$b05-03-07$c01-21-00
=998 \\$ain$apm$b01-21-00$cm$da$e-$feng$gdcu$h4$i1
=945 \\$g1$h0$j0$k0$lpmdfc$o-$p(dollar)0.00$q $r-$s-$t0$u0$v0$w0$x0$y.i25700376$z01-21-00
=945 \\$g1$h0$j0$k0$linter$o-$p(dollar)0.00$q $r $s$j$t0$u0$v0$w0$x0$y.i38098817$z05-03-07
```

Note: MarcEdit can be used to reorder MARC fields into proper order

Use MarcEdit to Re-Create MARC File with URLs

```
MarcEdit C:\Documents and Settings\cbrown\My Documents\01 GovDocs\NASA Project\NASAlast-d.mrk
File Edit Fonts Tools View Reports Help
FLDR 01703nam 22003857a 4500
=001 39777137
=003 OCoLC
=008 980831s1996\\dcu\\b\\f000\0\eng\l
=035 \\\a(GPO)97100389
=037 \\\a19970009364$bNASA
=040 \\\aGPO$cGPO$dDLC$dMvI$dMvI
=049 \\\aDVP2
=074 \\\a0830-D (MF)
=086 0\\\aNAS 1.15:112038
=099 17$aNAS 1.15:112038
=100 1\\\aSaphir, William.
=245 14$aThe NAS Parallel Benchmarks 2.1 results$h[microform] /$cWilliam Saphir, Alex Woo, and Maurice Yarrow.
=260 \\\a[Washington, D.C. :$bNational Aeronautics and Space Administration ;$aSpringfield, Va. :$bNational Technical Information Service,
distributor,$c1996]
=300 \\\a1 v.
=500 \\\aShipping list no.: 98-0810-M.
=533 \\\aMicrofiche.$b[Washington, D.C. :$cNational Aeronautics and Space Administration,$d1997]$e1 microfiche.$f(NASA-TM ; 112038).
=650 17$aComputer systems performance.$2nasat.
=650 17$aCray computers.$2nasat.
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=650 17$aSupercomputers.$2nasat.
=700 1\\\aWoo, Alex.
=700 1\\\aYarrow, Maurice.
=710 1\\\aUnited States.$bNational Aeronautics and Space Administration.
=830 10$aNASA technical memorandum ;$v112038.
=856 41$uhttp://library.du.edu/findit/peak/redirect.cfm?LinkURL=http://hdl.handle.net/2060/19970009364$zAccess online version
=907 \\\a.b25255678$b05-03-07$c01-21-00
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=945 \\\g1$h0$j0$k0$lpmf$c$o-$p(dollar)0.00$q $r-$s-$t0$u0$v0$w0$x0$y.i25700376$z01-21-00
=998 \\\ain$apm$b01-21-00$cm$da$e-$feng$gdcu$h4$i1
```

MARC Tools

File Tools Help

User Input

Input File:
C:\Documents and Settings\cbrown\My Docu

Output File:
C:\Documents and Settings\cbrown\My Docu

MARC Functions

MarcBreaker Translate to UTF-8
 MarcMaker
 MARC->MARCXML
 MARCXML->MARC

XML Functions

MARC->Dublin Core
MARC->EAD

Results:

Execute Edit Records Cancel

After Running MarcEdit....

p1703nam 22003857a
45000010009000000300060000900800410001503500180005603700220007404000280009604900090012407400160013308600200014909900200016910000210018924501060
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0a(GPO)971003890 0a199700093640bNASAD 0aGPOCcGPOCdDLCdMvIDdMvID 0aDVP20 0a0830-D (MF)00 0aNAS 1.15:1120380 70aNAS 1.15:11203801 0aSaphir,
William.0140aThe NAS Parallel Benchmarks 2.1 results0h[microform] /0cWilliam Saphir, Alex Woo, and Maurice Yarrow.0 0a[Washington, D.C.
:0bNational Aeronautics and Space Administration ;0aSpringfield, Va. :0bNational Technical Information Service, distributor,0c1996]0 0a1 v.0
0aShipping list no.: 98-0810-M.0 0aMicrofiche.0b[Washington, D.C. :0cNational Aeronautics and Space Administration,0d1997]0e1
microfiche.0f(NASA-TM ; 112038).0 70aComputer systems performance.02nasat.0 70aCray computers.02nasat.0 70aParallel computers.02nasat.0
70aParallel processing (Computers)02nasat.0 70aSupercomputers.02nasat.01 0aWoo, Alex.01 0aYarrow, Maurice.01 0aUnited States.0bNational
Aeronautics and Space Administration.0 0aNASA technical memorandum
;0v112038.0410uhttp://library.du.edu/findit/peak/redirect.cfm?LinkURL=http://hdl.handle.net/2060/199700093640zAccess online version0
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1.15:11203401 0aSohn, Andrew.010aImpact of load balancing on unstructured adaptive grid computations for distributed-memory
multiprocessors0h[microform] /0cAndrew Sohn, Rupak Biswas, and Horst D. Simon.0 0a[Washington, D.C. :0bNational Aeronautics and Space
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